

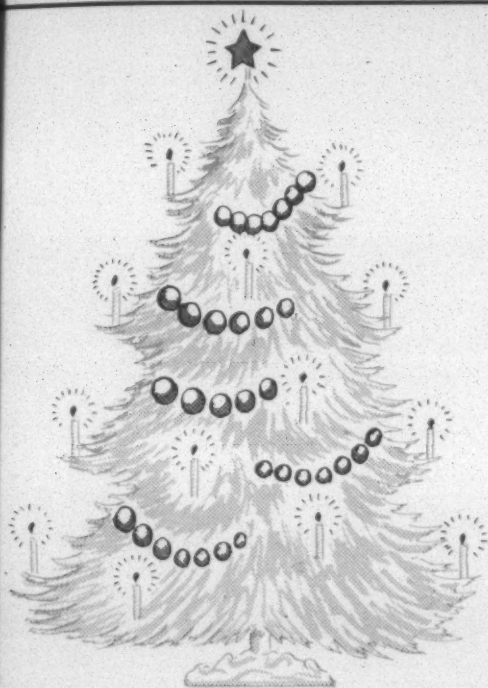
TEXTILE BULLETIN



VOL. 59

DECEMBER 15, 1940

NO. 8



To our many Friends and
Patrons throughout the Textile
Industry we extend Best Wishes
of the Season

How To Bring GOOD WISHES TO YOUR EMPLOYEES 365 Days In The Year



Employers can arrange for their Employees few gifts that represent more lasting satisfaction upon both sides than making available a HUMAN SECURITY Plan that protects workers against emergencies.

Such emergencies embrace death in the family, loss of time due to accident or sickness, hospitalization or operation when necessary, aid for dependents upon employees' death and the providing of maternity benefits.

A Provident Plan for your Employees can be devised to embrace any or all of these protection features in varying amounts as you prefer, through this HUMAN SECURITY program.

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help Employees meet Emergencies



IN THE NEWS

an advertisement from
The Saturday Evening Post, September 14, 1940

on SACO-LOWELL Combers

THE SATURDAY EVENING POST
125

NOW
Combed Sheet Luxury
FOR ONLY A LITTLE MORE THAN ORDINARY SHEETS

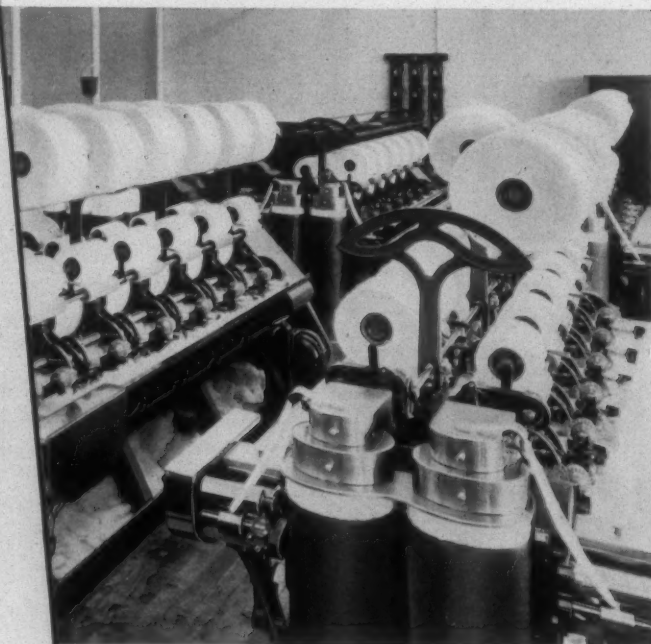


INDIAN MAIDEN
Combed PERCALE SHEETS **\$1.75**
72 X 108

LAST year Nashua gave you Putney—the luxury blanket, at the economy price of \$5.95 that became an overnight sensation and goes on breaking records. Now Nashua introduces Putney's mate, Indian Maiden sheets, a Combed percale that offers you new, greater sheet luxury for only a little more than ordinary sheets.

Never before has a Combed percale been regularly offered at the popular price of \$1.75! Combing removes the short fibres... leaves only the fine, long fibres which give Indian Maiden that lovely, petal-smooth texture you usually find only in the higher-priced sheets. They're so light you'll find substantial savings in your laundry bill, so strong, with their wide tape selvage, that they give you extra years of service. Truly worthy bed companions of Putney blankets. Featured now in the best department stores from coast to coast. NASHUA MFG. CO., Nashua, N. H.

Nashua



**DIFFERENT IN PRINCIPLE
NEW IN DESIGN**
29 Distinctive Features
17 Exclusive Features

As Nashua says: "Indian Maiden Percale Sheets have that lovely petal-smooth texture usually found only in higher-priced sheets... They're so light... so smooth... they give extra years of service." Of course, Saco-Lowell Combers are used in making Indian Maiden Percale Sheets.

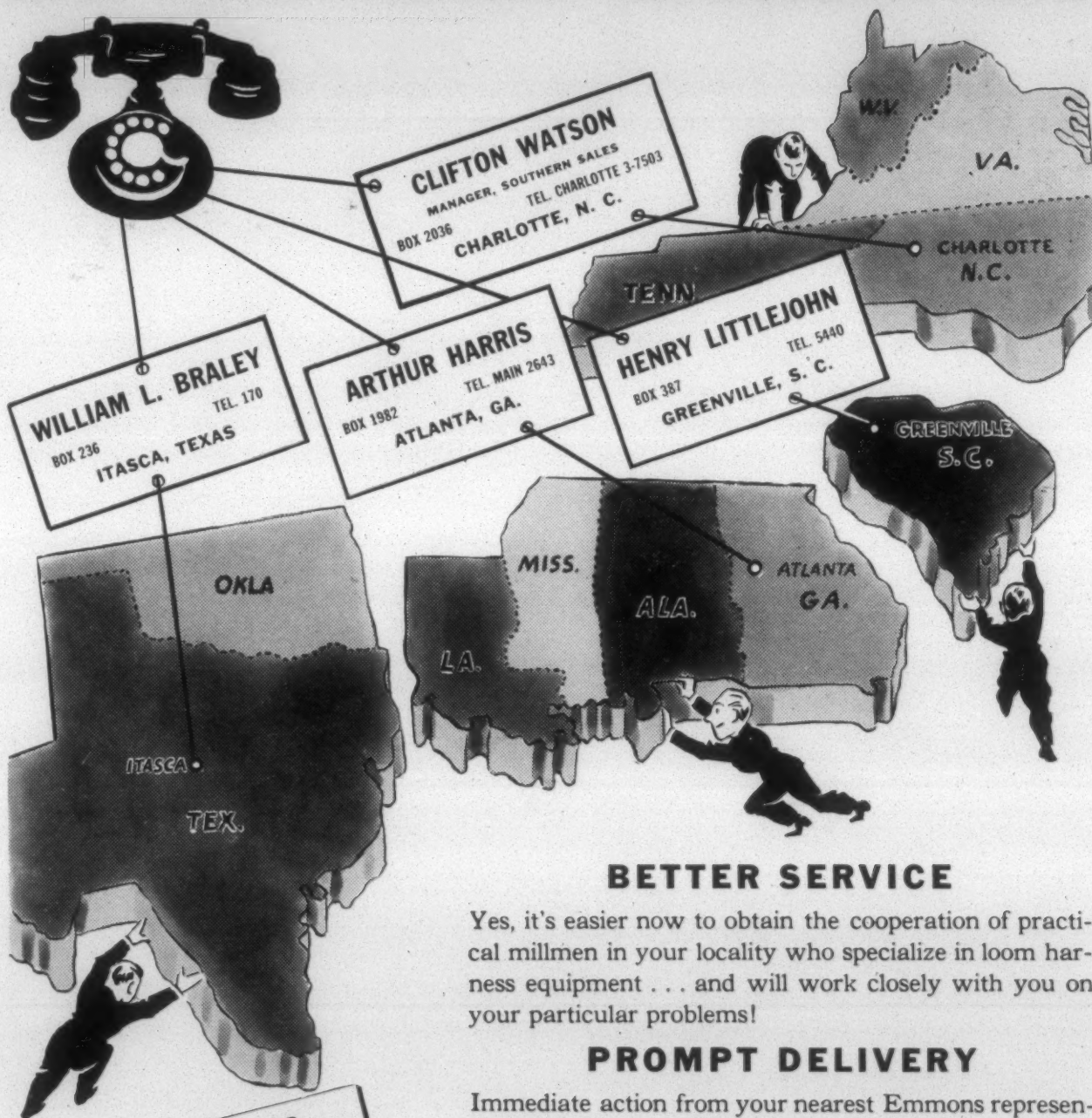
The Saco-Lowell Comber in much more than just another comber. It is basically different in principle, design, and most particularly, in its ability to combine improved quality with greatly increased production.

The design features which distinguish the Saco-Lowell Comber from all others and make possible the new standards of performance, are fully described in a new bulletin just off the press. Write for your copy.

SACO-LOWELL SHOPS

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Charlotte, N. C. Greenville, S. C. Atlanta, Ga.

YOU GET ACTION IN YOUR STATE WHEN YOU CALL THESE EMMONS REPRESENTATIVES



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Frames . . . All-metal Reeds (also
semi-metal, pitch band, Flex-bac) . . .
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PROMPT DELIVERY

Immediate action from your nearest Emmons representative will save you time and trouble. Emmons products, including standard sizes of flat heddles, are now stocked in Charlotte and Atlanta. Top-quality reeds manufactured in Charlotte!

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SEE LATEST TEXTILE WORLD YEARBOOK FOR DETAILS ON ALL EMMONS PRODUCTS

Preparedness



For Your Mill



Wide World Photos, Inc.

Preparedness — To Make Ready for the Future. Our Nation is Spending Billions for it, and most of us would Feel Safer if we had Started the Spending Sooner.

Modern Industry believes in Preparedness. The Automobile Companies begin Work on Newer Models as soon as the Year's New Model has been put on the Market. And even while Business is Still good they Halt Production to put in Machinery to Build Next Year's Cars.

The Textile Industry is an Old Industry and has many traditions to discard. Young Men in some mills and Progressive Older Men in others believe in Preparedness. They know that Looms of a Few Years Ago must be replaced by Looms of Today whenever Today's Looms are Better.

High Speed X Series Looms Are Better Looms They
Are At Least 20% Faster They Have Been
Proved Progressive Mills Are Buying Them

Many Who Hesitate today say: "The Cotton business is too good to curtail for the installation of Even a Few New Looms." "The Rayon business is slowing up. I'm not Sure of the Future, I can't afford to Buy Looms."

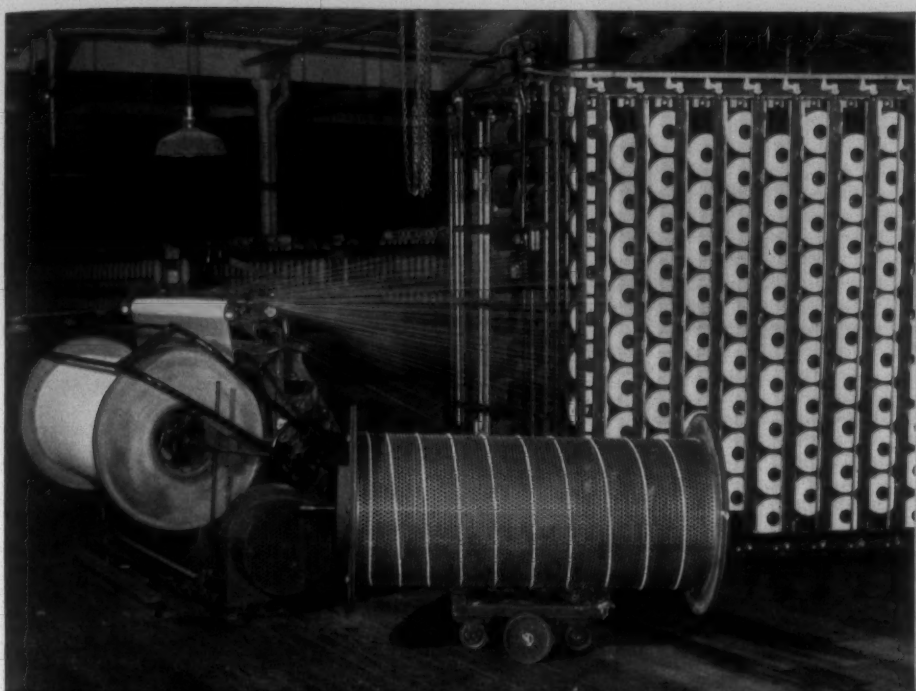
Learn from the Automobile Builders ♦ They Prepare for Good Business ♦
They Get Good Business ♦ They Make Money on it

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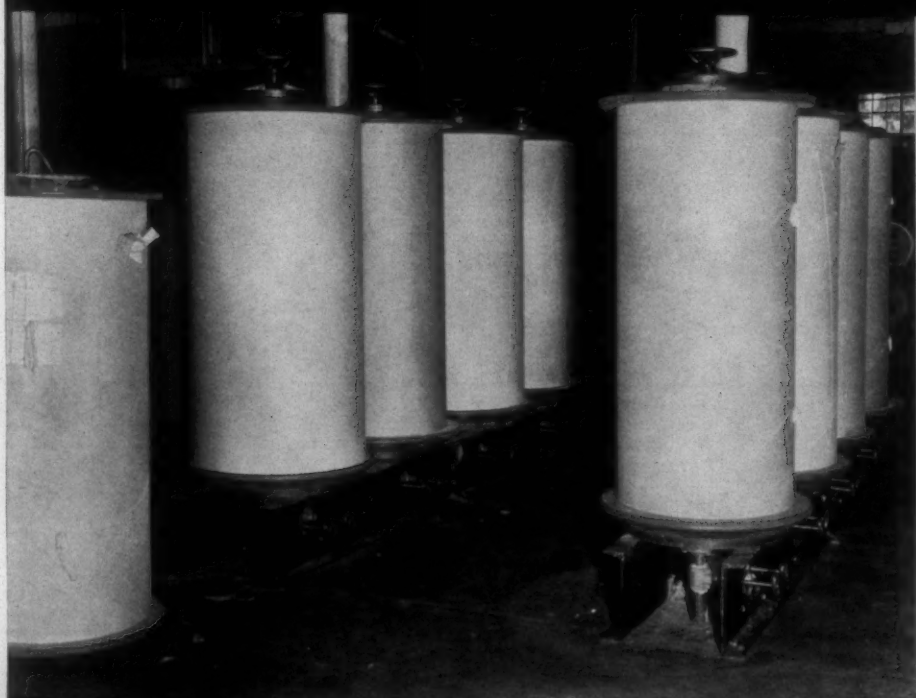
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*For Best Results
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Spooling and Warping
•
AUTOMATIC SPOOLER
SUPER-SPEED WARPERS*

SUCCESSFUL DYE BEAM WARPING...

EASILY ACCOMPLISHED ON BARBER-COLMAN SUPER-SPEED WARPERS



By using a special attachment on the standard Barber-Colman Super-Speed Warper, dye beams can be wound with accurately controlled UNIFORM DENSITY throughout the beam. This results in better, more uniform, more economical dyeing. The pictures show (above) a dye beam running and (below) a load of dyed beams on a drying rack.

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ROCKFORD, ILLINOIS, U. S. A.

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THIS IS NO. 24 OF A SERIES ON

GETTING THE MOST FROM WINDING

Information about winding designed to show improvements in winding equipment and new ideas in the winding operation



GAINER BELT TENSION

(No. 50 Winder)

When mills experiment with the tension on the Gainer Belts, they are usually trying to get a more uniform lay of yarn on the wound package. Sometimes they add old gears and junk iron to the standard 2 1/4-lb. Weight, and while this may result in some improvement, there is the danger that the increased strain on the belt will result in shorter belt life and in excessive wear on the spindle and cam shaft bearings.

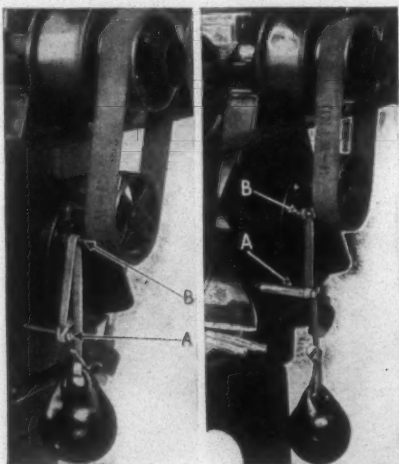


FIG. 1

FIG. 2

Standard arrangement of Cord and Weight shown at left. Variation of standard arrangement is at right—illustrating use of longer Pin.

Mills also experiment with the arrangement of Gainer Frame Weight and Cord. In the standard arrangement (Fig. 1), the free end of the Cord is passed through the Staple (B) on the Gainer Case and around the Pin (A).

Among the variations of this arrangement, by means of which the mills hope to get uniform tension, are the following:

1. An extra wrap is taken around the Staple.
2. An extra wrap is taken around the Pin.
3. The end of the Cord is attached to the

Staple, and the Cord is wrapped around the Pin (Fig. 2). A longer Pin is used.

Other mills prefer to replace the Weight and rawhide Cord with a spring connecting the Pin and Staple.

Meanwhile, the cause of the uneven winding may not be variation in belt tension at all. Among the possible causes are these:

1. Gainer Belts may not be all of the same width. The standard belt is one inch wide.
2. Gainer Belts may not be uniform in thickness. Any variation from the proper 1/16" thickness will vary the effective diameter of the pulleys.
3. The Gainer Belts may not be the same material. There is a difference in coefficient of friction between leather and fabric belts.
4. Gainer Belts may vary with changing humidity—particularly over weekends.

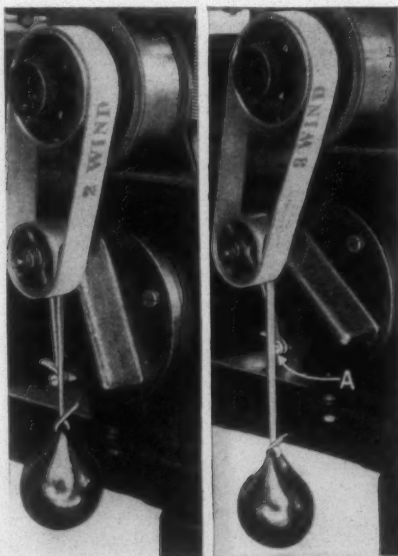


FIG. 3

FIG. 4

Figure 3 shows a "2-wind" Gainer Belt with a "2-wind" Pulley, which is correct. Figure 4 shows a "3-wind" Belt on the same "2-wind" Pulley. This permits the Pulley to drop, and the increased tension will cause extra belt stretch, with ultimate danger of Gainer Case coming in contact with Pin (A).

5. Certain of the Gainer Belts may be oily. All belts should be kept clean.

6. Gainer Belts may not be uniform in length (Figs. 3 and 4). A longer belt allows the Gainer Pulley to drop down further, and the extra leverage from the center of the Gainer Case will add tension to the belt, but as the belt stretches, the Gainer Case may strike the Pin, which will cause an intermittent variation in tension.



NEW COIL SPRING FOR TRAVERSE FRAME DOG LEVER (No. 50 Winder)

Thorough tests of a new coil spring to replace the flat steel spring formerly used on the Traverse Frame Dog Lever, indicate a much longer life.

The new coil spring is attached by means of the same screw used for the flat spring. Since the new spring is located near the top of the Lever, it permits a much better adjustment of the tension on the Dog.

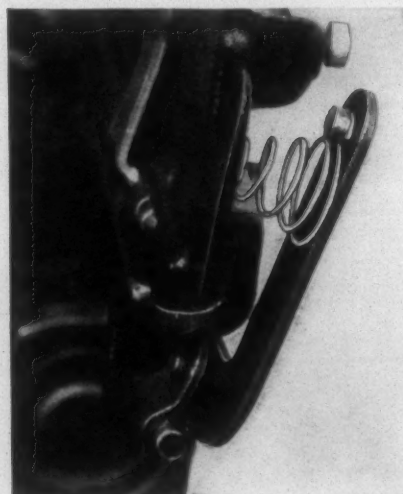


FIG. 5

Traverse Frame Dog Lever Spring — Part 50-466-6

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"THERE'S A UNIVERSAL WINDER FOR EVERY TEXTILE NEED"

*Reg. U. S. Pat. Off.



Glancing Back at The Textile Industry In The First World War*

By Lt. Col. George F. Spann

Lt. Col. Spann, Q.M.C., Procurement Planning Officer, War Department, New York General Depot, reviews some of the conditions that prevailed in the textile industry, as well as other industry, during World War Number One. Government buying in time of emergency is a far cry from civilian buying normally, and a glance back at some of the demands and difficulties of the last emergency may serve to prevent them or at least soften them during the present crisis.

A LITTLE over one hundred years ago, man became scientific. The natural result of this was unification of American business and expert knowledge. Thus, extraordinary strides were made in converting the natural wealth of this country into means for human comfort and satisfaction. Practices looking to efficiency in production and conservation and control in quantity production were inaugurated everywhere.

World War I introduced a new element into this situation. Group action, industry by industry, was devised. The principle of united action and co-operation brought about the organization, for the first time, of hundreds of trades into national associations.

These associations, as they stand, are capable of eliminating wasteful practices attendant upon multiplicity of styles and types of articles; assist in cultivating the public taste for rational types of commodities by exchange of trade information; and avoid extravagant methods of production and distribution.

In that national emergency, the existence of a few of these associations at the beginning were of incalculable aid to supply organizations.

Acting as agent and representing an industry, the various units composing a particular industry joined in appointing a committee to act as its spokesman. The strongest men in industry usually served and thus there was unified control from individual plants and companies

through war service committees. The war service committees were constant sources of information regarding the sentiments of the trades, their complaints, and their suggestions.

Textiles

World War I brought with it a very distinct disturbance in the textile industries. It became necessary to provide at once entirely new and unusual outfits. The Army needed warm uniforms and overcoats and good socks and underwear. Unheard of quantities of blankets, raincoats, duck, tarpaulins, tents, belts and bandoleers of cotton webbing were required.

To manufacture these and other supplies for an American army that eventually reached a strength of 3,750,000 men required the best brains in the textile industry. Experts in many textile branches from the laboratories and the factories were called upon for the proper construction of all sorts of articles and the education of manufacturers in the production of articles strange to their experience.

Cotton

Throughout the war, there was always a surplus of raw cotton in this country, and it was found unnecessary to control either prices or distribution of the domestic fibre. As soon as the United States entered the war, the prices of cotton fabrics, cotton yarns, and raw cotton all began to rise rapidly—the fabrics more rapidly than the yarns; and the yarns more rapidly than the raw cotton. There was an urgent demand for finished fabrics, which had to be met at any cost.

The heaviest demands of the Government on the cotton goods trade and those which strained it most, were for duck, denim, twills and webbing. The shortage in duck and methods for overcoming it had been studied from the beginning of the war. Many carpet and tire fabric mills converted their machinery for the manufacture of heavy duck, specialty mills for shelter-tent duck and fine goods mills for airplane and balloon cloth. But with all that could be done by way of increased facilities, the summer

*Talk delivered at the Symposium on Textile Preparedness for National Defense, under the auspices of the American Association of Textile Technologists.

of 1918 faced both a present and anticipated shortage in this fabric.

Cotton Cloth

The production of cotton cloth for the Army appears fantastic—over 800,000,000 square yards of cotton textiles. Spread this strip out on a cosmic floor and you can place upon it side by side, 55 globes as large as the earth.

In addition to the cotton khaki required for uniforms and other purposes, the principal other cotton items were duck, denim, webbing, gauze, venetian, sheets, pillow cases and towels.

The requirements of cotton duck and webbing leaped upwards. The demands were greater than could be supplied by the output of mills regularly producing these materials, and manufacturers producing similar materials were called upon to adapt their plants to the production of duck and webbing, which they did, in many cases, at considerable inconvenience and expense.

Among the firms assisting in supplying these materials were manufacturers of carpets, automobile tire fabric, asbestos brake linings, hose, lamp wicks, suspenders, garters, cotton belting, etc. All of these plants adapted to emergency manufacture were dependent on purchased yarns.

Considerable burlap for packing bags, silk for flags, hat bands and badges were purchased in quantity; over 100,000,000 yards of denim, 140,000,000 yards of gauze, 120,000,000 yards of webbing and 300,000,000 yards of various kinds of duck. At the beginning of the war, an order for 5,000,000 yards of webbing fairly staggered the industry, but that industry was to witness the day when an order for 50,000,000 yards would be absorbed as a matter of course. At one time every mill in the country whose normal business was sheeting was working for the Government. In order to provide a sufficient manufacturing capacity for cotton underwear, women's underwear factories were enlisted for war work, and so were even corset factories.

Wool

The chief war problem of the wool industry lay in the supply of raw material. The annual consumption of raw wool in the United States increased steadily from about 450,000,000 pounds in 1913 to 752,000,000 pounds in 1918. Our domestic production was about 290,000,000 pounds a year. As the period of production from raw wool to clothing varies from six months to a year, it can be seen how a prospective demand for large and prompt deliveries of cloth would upset the industry.

The entire woolen industry, from the handlers of raw wool to the textile mills, worked splendidly with the Government. At all times there was plenty of available machinery to make all the cloth for which wool could be furnished. Mills which found no Government use for their regular output made something else that was needed. Many of the carpet mills swung their entire production to Army blankets and Army duck.

From the beginning of the summer of 1918, no new stocks of raw wool became available for civilian uses in the country. At the same time, only about 45% of the looms were engaged on war work. As the shortage of wool began to be anticipated and actually felt in the mills manufacturing for civilian consumption, the demand for rags and reworked wool began to be very sharp. Very little of

this material was used in government work. Persistent demands were made by manufacturers that government wool be allocated for civilian cloth. After a careful study it was decided government wool would probably not be available for civilian use before April 1, 1919, without encroaching upon necessary military supplies. The close of hostilities naturally left very large stocks of raw wool in the hands of the War Department because of preparing for the future.

It was not only necessary for the Government to furnish cloth for uniforms, shirts and other articles, but cotton linings, tape, felt for linings and thread; also flags.

It was not a simple task to get woven fabrics for the Army's needs. None were standard for civilian use, either in material, color or pattern. Everything had to be made to order. Many mills *could not* begin on contracts for fabrics without special training and sometimes costly preparation.

At first the supply of the better grades of wool seemed to be adequate to meet the Army's demands. It later became necessary to use grades of wool previously made into coarse materials like carpet. The lower grades of wool were blended with the finer grades to provide necessary weight and warmth, even at the expense of fineness of texture and appearance. It was always a problem to find olive drab dyes that were fast in color.

The total purchases were about 22,000,000 blankets; melton cloth for overcoats and uniforms amounted to more than 100,000,000 yards or enough to stretch twice around the world at the equator, with a strip left over long enough to reach from New York across Germany and Russia and into Siberia.

The woven fabrics produced the clothing and equipment shown below:

Blankets	19,419,000
Coats, denim	10,238,000
Coats, wool	12,365,000
Drawers, winter	33,766,000
Drawers, summer	38,118,000
Overcoats	7,748,000
Shirts, flannel	22,198,000
Shoes, marching and field	26,423,000
Stockings, wool, light and heavy	89,871,000
Trousers and breeches, wool	17,342,000
Undershirts, summer	40,895,000
Undershirts, winter	28,869,000

Silk

The articles manufactured consisted of cartridge bag cloth, silk parachute flares, cartridge igniter cloth, cartridge bag lacing cord, ballastite rings, taffetaline, cotton webbing, cap ribbons, cravats, neckerchiefs, spool sewing silks and banner silks.

There were two principal products involved in the war program; first, the cartridge bag cloth, a heavy natural silk fabric; and second, a light weight pure silk taffeta cloth, used for parachute flares. The cloth most adaptable for these flares was Japanese habutai. A similar fabric woven by American mills gave complete satisfaction. But the problem of securing the millions of yards of coarse silk required to make the bags in which all propellant powder for large guns is loaded, was a more difficult one. Experiments were made looking to a substitution of cotton cloth chemically treated, but they failed. Silk is the only fabric which is known to be completely consumed in burning, never leaving hot ashes in the gun after firing. A great many cotton and woolen looms were converted to the production of this silk.

(Continued on Page 48)

Terms Relating to the "Hand" of Fabrics*

SIGNIFICANT progress is being made in our knowledge of the hand of fabrics and methods for evaluating hand as a result of the work of research associateships maintained at the Massachusetts Institute of Technology by the American Association of Textile Chemists and Colorists and at the National Bureau of Standards by Committee D-13 on Textile Materials, of the American Society for Testing Materials. The cordial relation established between these two groups by the chairmen of the special committees responsible for the work, respectively, Mr. Kenneth H. Barnard and Dr. L. B. Arnold, has resulted in the coordination of programs and added to the accomplishment.

A joint meeting of representatives of the groups was held at the Chemists' Club in New York City on September 18, 1940, for the purpose of comparing results and discussing programs of work for the coming year. Prof. Edward R. Schwarz, who is in charge of the work at M.I.T., and his assistant, Miss Lelia J. Winn, described the latest model of the Drapemeter. Dr. Edwin C. Dreby, research associate at the N.B.S., described the Planoflex, Contour Meter, and Friction Meter. These instruments have all been developed in the course of the work and offer exceedingly simple and relatively inexpensive means for evaluating physical characteristics of fabrics which affect the hand. Tentative plans for further work were prepared in order to avoid duplication of effort and to make the studies of the two groups mutually supplementary.

Recognizing the need for a clarification of the terms used in describing the "hand" of fabrics, the two groups agreed upon terminology to be submitted to their parent organizations and to all interested in the subject, for criticism and, after such revision as may be necessary, for

general adoption. The words chosen to represent the physical properties on the one hand and the corresponding elements of "feel" on the other were selected to be perhaps the least ambiguous or objectionable of the several that could be considered. Simple words, understandable to the layman as well as to the engineer or scientist, were chosen. They are not to be construed in a highly specialized sense in which some of them have been used in other fields. It was recognized that fabrics vary in certain definite physical properties which can be evaluated with suitable instruments. In order to compare the results with the hand of fabrics as judged by the experts, it is necessary for the experts to analyze their appreciation of hand into components corresponding to physical properties. This necessitates a consciously directed effort in judging hand. The accompanying table of proposed terms should help to make this possible.

As the work progresses and tentative standard tests for each property are recommended, explicit definitions of the properties measured by the tests will be added to it. Since nearly all tests of cloth involve arbitrary factors which may have to be varied for different kinds of cloth, more than one test for a given property may be necessary, depending upon the use to be made of the result. Later on the table may also be enlarged to include graduated scales for the indicated ranges of hand, though it is expected that these ranges will be used primarily in a relative sense for describing the hand of groups of similar fabrics rather than for one scale for all fabrics.

It is suggested for consistency and better understanding among those dealing with the hand of fabrics that the proposed terms be used regularly in preference to the many other terms that might be substituted for them.

Comments and suggestions on the proposed terms are solicited. They may be sent to any of the organizations or persons named above.

*Reprinted from Proceedings of American Association of Textile Chemists and Colorists.

Proposed Terms To Be Used in Naming the Physical Properties of Fabrics Related to Hand and for Describing the Corresponding Components of Hand

<i>Physical Property</i>	<i>Explanatory Phrase</i>	<i>Terms to Be Used in Describing the Range of the Corresponding Component of Hand</i>
1. Flexibility	Ease of bending	Pliable (high) to stiff (low)
2. Compressibility	Ease of squeezing	Soft (high) to hard (low)
3. Extensibility	Ease of stretching	Stretchy (high) to non-stretchy (low)
4. Resilience	Ease of recovery from deformation in which rate of recovery is without limits and thus includes elasticity (instantaneous recovery)	Springy (high) to limp (low). Resilience may be flexural, compressional, extensional, or torsional
5. Density	Weight per unit volume (based upon A.S.T.M. standard measurement of thickness and fabric weight)	Compact (high to open (low)
6. Surface contour	Divergence of the surface from planeness.	Rough (high) to smooth (low)
7. Surface friction	Resistance to slipping offered by the surface	Harsh (high) to slippery (low)
8. Thermal character	Apparent difference in temperature of the fabric and the skin of the observer touching it.	Cool (high) to warm (low)

Erecting, Overhauling and Fixing Looms

By Frank D. Herring

Following is the twelfth chapter of a series of articles on loom fixing and loom maintenance by a practical mill man. Accompanied by illustrations of all portions of a loom, this series will go into minute detail explaining the various motions and their settings, timings, repairs, etc.

Applying and Setting the Motor Stand

First, tighten securely all the bolts in the outside bearing support, brackets, braces, and the shipper sleeve stud. Place the motor stand in place on the milled surface of the outside bearing support and tighten the motor stand securely. Then place the square, shown in Figure 35-B, on the motor stand, with the square touching the finished rim of the friction gear above and below the motor stand. If not, remove the motor stand and file and fit to the desired result.

This procedure is considered by some to be of minor importance, but in fact it is vitally important, first, on account of the actual first cost of the parts involved. The

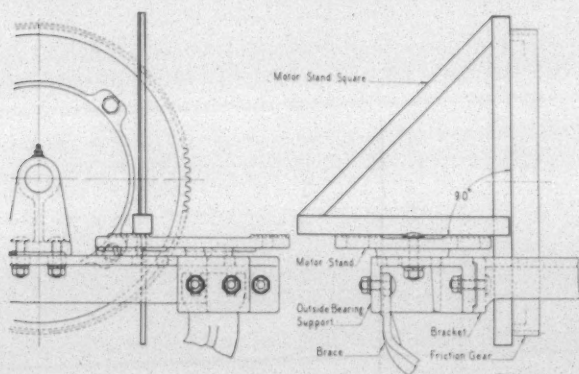


Fig. 35-B

motor pinion is a costly part, and the friction gear is a costly part, and of course they will wear out very quickly unless they are properly meshed in gear. The wearing out and replacement of these gears amounts to only a small part of the cost and ultimate loss. The greatest cost, or loss, will be in the loss in production, due to loom stoppage on account of bad running of the loom and motor troubles. If the gears are not lined and meshed properly the speed of the motor will be retarded, causing the loom to run badly, and will also cause excessive wear on the motor bearings, and ultimately a burned out motor will result. By this method the gears will be exactly in line with each other—in other words, the gear teeth, in the pinion and friction gears, will be on exact parallel lines with each other, and this is the real objective. Should the

motor alone be leveled, it is possible still for the gears to be out of alignment, because the outside bearing support is seldom exactly level with the loom, to which the friction gear is attached. A gauge for this work, shown in Figure 35-B, can be made very easily, using strips of hardwood about $\frac{1}{2}$ inch thick by two or three inches wide.

Instructions for Adjusting the No. 8 Dry Disc Clutch

Remove cap screws and take off shipper sleeve arm. Adjust clutch fingers by means of clutch finger adjusting screws until driving clutch cone can be moved to the on

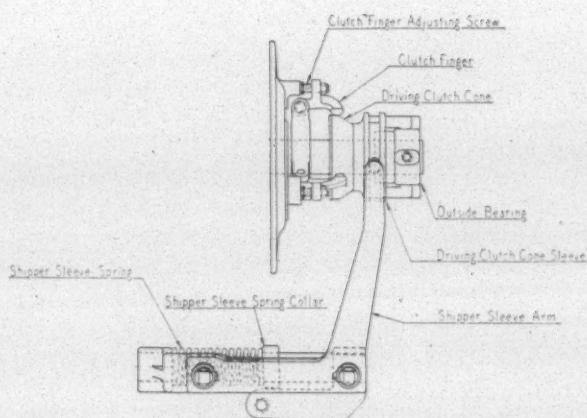


Fig. 36-X

position by bracing both thumbs on outside bearing and pulling driving clutch cone sleeve by means of two fingers on each hand. It is very important that the three clutch fingers be adjusted evenly so that each finger will exert equal pressure on the driving clutch cone sleeve. Assemble shipper sleeve arm with clutch parts and shipper handle in the ON position. Move the shipper handle to OFF position. Bring shipper sleeve spring collar against spring and tighten set screws in collar. Shown in Figure 36-X is sketch of the No. 8 dry disc clutch.

Setting the Tape Selvage Motion

Various types of tape selvage motions are in use, but rules for setting them are all practically the same. First, adjust the selvage roll bearing brackets, the treadle stud collar, and the bottom shaft pulley to line the harness strapping and the heddles vertical, and have the heddles as near the warp yarn in the main body of the warp as

(Continued on Page 14)



TUFFERIZED Card Clothing

U. S. PATENT NO. 2,174,173

Goes Over the Top

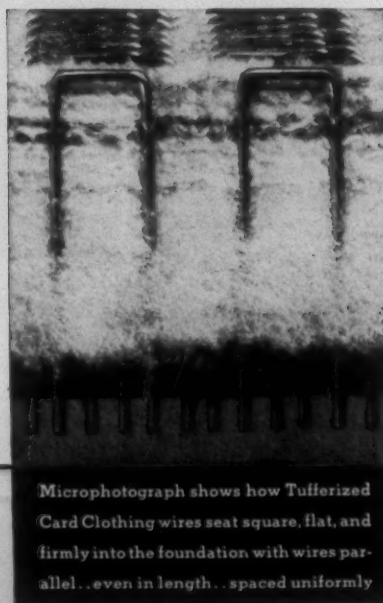
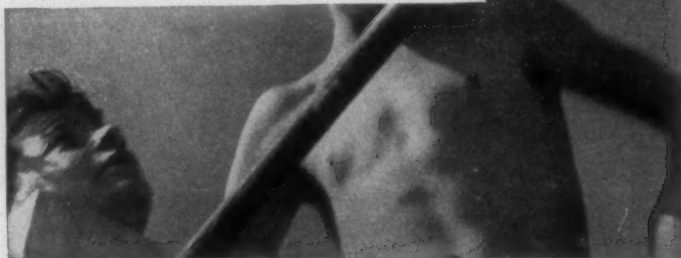
Amazing improvements, precision uniformity, and patented-process, produce new high peaks in quality as well as customer satisfaction. Tufferized Card Clothing has wires projecting to exactly the same length, and points lying in the same plane. When mounted on your cylinders there is no change or variation of position and you can set your rolls to closer limits.

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Products: Card Clothing for Woolen, Worsted, Cotton, Asbestos, and Silk Cards—Napper Clothing, Brush Clothing, Strickles, Emery Fillets, Top Flats Recovered and extra sets loaned at all plants—Lickerins and Garnett Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plant—Midgley Patented Hand Stripping Cards, Howard's Special Hand Stripping Cards and Inserted-Eye and Regular Wire Heddles

Microphotograph shows how Tufferized Card Clothing wires seat square, flat, and firmly into the foundation with wires parallel... even in length... spaced uniformly


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Erecting, Overhauling and Fixing Looms

(Continued from Page 10)

possible to avoid chafing. Set the tape harness same as setting any other harness, by adjusting the strap hooks.

With the shuttle in the left hand end of the loom, and the harness for main body of warp level, tighten the selvage motion gear and the selvage motion driving gear, turn the left hand selvage cam to level the left hand tape harness. Tighten the left hand selvage cam, then turn the crankshaft one complete revolution, placing the shuttle in right hand end of the loom. Then turn the right hand tape cam to level the tape harness with the other harness, and tighten the right hand tape harness cam. The tape selvage harness should always be adjusted so as to have

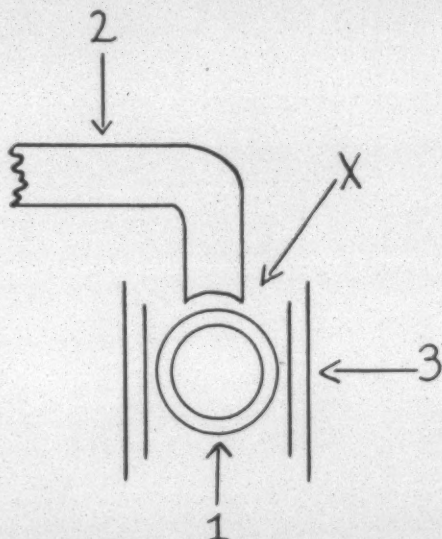


Fig. 4-X

the warp yarn in the tape selvage shaded in perfect alignment with the warp yarn in the main body of the warp.

Should the tape selvage yarn be higher from the race plate than the main body of the warp there will be undue chafing and strain put on the tape yarn by the passage of the shuttle over it and this will cause excessive breakage of the tape threads.

The purpose of a tape selvage is to give the woven fabric a better appearance by making a smoother, more even selvage, and also to prevent excessive breakage of the selvage threads while being woven. The reason that a tape selvage will break less while being woven is that the tape selvage threads interlace with the filling yarn every two picks instead of every pick as the warp yarn in the main body of the cloth does.

Applying and Caring for the Temples

The temples are one of the costly parts of a loom and it is good economy to apply and care for them properly. The temples should always be set so as to have the temple caps and burrs at exact right angles with the reed. This setting will cause the temple burrs to be square in line with the fel or beat of the cloth as they should always be while in use.

Should the temple burrs be out of line with the fel of the cloth the teeth in the burrs will chafe the threads in the cloth near the selvage and make an objectionable fab-

ric. On fine number yarns, and especially rayon yarn, the temple burr teeth will very often cut the thread entirely when running out of line.

The temples should be set at a height so as to just barely clear the race plate while loom is running. They

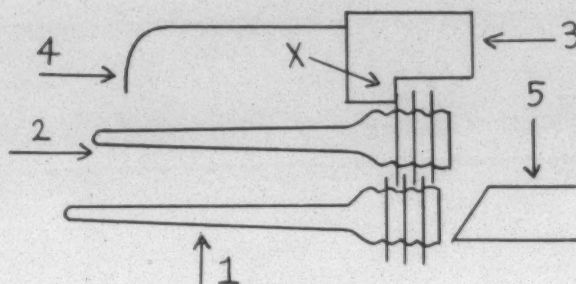


Fig. 5-X

are designed by the loom builders to run this way, and unless they are run so they will not function properly and do perfect work.

The temples should be oiled often but lightly, as too much oil applied here would damage the cloth. The temple burr screws, or pins, should always be tightened when the warp is out, as a loose screw will cause the burr to become permanently damaged and also will make imperfect cloth. The temple burrs are made in right and left hand, and care should be taken not to get them placed in the temples incorrectly. Should the burrs be put in the temples wrong they will not keep the cloth pulled taut and out to its place and thereby will cause excessive breakage of the selvage threads while loom is running.

The temple thread cutters should be removed once a week, preferably on week-end, and a small amount of grease applied to them at the point where they contact the temple bar while running. Unless they are kept lubricated at this point they will wear very rapidly and will also wear the temple bar, and this will allow the tips of the cutters to project low enough to come in contact with the front end of the bar, at the bottom, and thereby cause the cutters to be broken off.

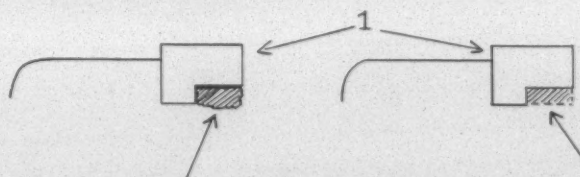


Fig. 6-X

The temple plates and brackets should always be filed and fitted in place instead of using cardboard or other loose material to adjust them in place.

Causes and Ways of Correcting Filling Breakage On Transfer

Anything that causes, or allows the transfer mechanism to lose, or partially lose, control of the bobbin while it is being delivered into the shuttle will cause filling breakage on the transfer.

Knowing how to do a job, or apply and adjust a part or piece on a loom is necessary to good loom fixing, but knowing why is more important, so I will try and give the causes, the remedies, and the reasons why.

(Continued on Page 47)

**SPECIALIZED MACHINERY FOR
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WHITIN MACHINE WORKS

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Draper Corporation Has New Loom Model for Heavy Cottons

Hopedale, Mass.—Draper Corporation, manufacturer of textile machinery, has just completed construction of another new loom model for heavy cottons. It is the XP for weaving many heavy fabrics up to and including light duck. The new model replaces the former modified D and P types. Like other X series looms, it operates at higher speeds than older models made for the same fabric range.

The Draper Corporation notes that extra weight and strength make a steadier running loom, which directly improves cloth quality and reduces loom fixing and maintenance expense.

The fabric range of the XP model is from narrow sheetings and drills to light duck, up to 72 inches in width. It will weave chafer cloth, awning cloth, bedspreads, certain rayon mixtures, upholstery fabrics and many others.

The loom is built for at least 20 per cent greater speed. A still further increase may be practical under favorable conditions.

The XP model follows the XD model rayon looms. The frame alone is 241 pounds heavier than in modified D models of the same width. Middle girts are braced directly to a heavy steel top girt. The breast beam is heavy, with a wide skirt, and each end is secured to the loomside by a three-bolt tie. The hopper stand is reinforced and is secured by four bolts in a wide foot, to better support the battery against vibration.

Harness motion may be underneath cams with improved adjustable treadles, or dobby up to 20 harness fifteen-thirty-second-inch gauge capacity. Optional lay and shuttle box constructions provide for sizes of shuttles ranging from a 9½-inch bobbin in 1⅝-inch opening to a regular shuttle with 8-inch bobbin in 1¾-inch opening.

The take-up is of the high-roll cotton type, made stronger and arranged to accommodate 21½-inch diameter roll of cloth.

The let-off is of the Roper type, improved and strengthened, with large band friction. Warp beams may be up to 26 inches in diameter.

Hillsboro Mill Loses Tax Case

Washington, D. C.—Establishing a precedent which may have far-reaching effect on many textile mills throughout the South, the U. S. Board of Tax Appeals Dec. 1st held that the Belle-Vue Mfg. Co., of Hillsboro, N. C., must pay deficiencies in undistributed profits taxes for 1936 and 1937 totaling \$20,582.93.

In effect, the Board determined that companies which have been operating at a deficit cannot apply newly won profits to the past deficits, but must pay taxes on all such profits undistributed.

The Board held that a corporation which has been taken over by a creditor's committee as a result of financial difficulties and subsequently makes a profit is liable to a surtax under the Revenue Act of 1936 and cannot claim exemptions nor credits under Section 26 of that law.

Because many textile mills are believed to have had experiences similar to the Hillsboro firm, the decision was regarded as of special importance.

As a result of losses in 1928 and 1929, the company was placed in charge of a creditor's committee. After

sustaining steady losses, the company made a profit in 1933 and 1934, but made no payment on its notes. It made profits in 1936 and 1937 and paid \$53,100.73 and \$77,906.55, respectively, on its notes. It claimed credits in excess of \$50,000 in both years, representing the amount of its net income in those years, in computing its undistributed profits tax.

The Board sustained the Tax Commissioner in disallowing these credits which amounted to paying a tax of \$8,914.13 for 1936 and \$11,668.80 for 1937.

The company contended that distribution of the profits in dividends was not possible because of the agreement under which the creditor's committee operated the business. But the Tax Board held that the directors had full power to declare a dividend if warranted by the company's financial condition.

Cotton Crop Forecast 12,686,000 Bales

Washington, D. C.—A United States cotton crop of 12,686,000 bales is forecast by the Crop Reporting Board, Department of Agriculture, in the final cotton crop report for the season.

Ginnings to December 1st totaled 10,870,247 bales, compared with 11,110,486 bales in 1939, and 11,230,522 bales in 1938. The ginnings report was issued simultaneously with the cotton crop report.

In connection with this forecast, the board issued the following statement:

A United States cotton crop of 12,686,000 bales is forecast by the crop reporting board of the Agricultural Marketing Service, based upon indications of December 1, 1940. This is a decrease of about 1 per cent from the forecast as of November 1st, and compares with 11,817,000 bales ginned in 1939, 11,943,000 bales in 1938, and 13,547,000 bales, the 10-year (1929-1938) average. The indicated yield per acre for the United States of 252.4 pounds compares with 237.9 pounds in 1939, 235.8 pounds in 1938, and 198.1 pounds, the 10-year (1929-1938) average.

In the area from Georgia to Texas, the development of late bolls was seriously retarded by adverse weather during November. Freezes in the middle of the month, and rains in some areas during the latter part were especially detrimental because of the lateness of the crop. The resulting losses during November totaled 212,000 bales in the States of Georgia, Alabama, Mississippi, Arkansas, Oklahoma and Texas.

Harvested acreage is now estimated at 24,078,000 acres, which is 1.1 per cent more than the 23,805,000 acres harvested in 1939. The December 1st estimate is about 1.3 per cent less than the acreage estimate used in preparing the reports for September, October and November. Allowing for the estimated abandonment of 4 per cent, the cotton acreage in cultivation on July 1st is indicated to have been 25,073,000 acres. The abandonment in 1940 was greater than average, some acreage having been removed by farmers after July 1st in order to be in compliance with the agricultural conservation program.

Harvesting and ginning of the 1940 cotton crop are later than in any recent year. A smaller percentage of the crop was ginned up to December 1st than in any year since 1926.

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2. Prevents the formation of lime soap.
3. Valuable assistant in the dyeing and finishing of all fibers.
4. Better whites and brighter colors in washing after printing.
5. Cleaner goods and more level shades in dyeing of hosiery.
6. Superior leveling, dispersing and penetrating agent.

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1. Exceptionally effective in the scouring of wools, both yarn and piece goods.
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S. C. Mill Men Discuss

National Defense

The first part of the report of the meeting of the Carding and Spinning Section of the South Carolina Division of the Southern Textile Association, held at Clemson College, S. C., on October 12th, was published in the December 1st issue, and contained introductory remarks by Chairman W. T. Morton, Dean H. H. Willis, of the Clemson Textile School, and Dr. Frank Poole, president of Clemson College; and a patriotic address by Heywood Mahon, chairman of the Defense Program Committee of the State of South Carolina. At the conclusion of Mr. Mahon's talk he asked for any questions from the floor. A stenographic report of the meeting follows:

Question: May I ask just what we are doing concerning this sabotage?

Mr. Mahon: We are doing a lot. That's not an easy question to handle. Mr. Edgar Hoover, head of the G-men, is one of the most capable officers in our nation, and his men are constantly uncovering sabotage activities, but there are not nearly enough G-men under his command to cover the nation properly.

One reason the general public does not realize the tremendous amount of work these men are doing, and the results they are getting, is because the work has to be done quietly. If Hoover asked Congress for funds necessary to investigate sabotage activities in the cotton mills of the South, for example, it would be a matter of public record, and the sabotage would immediately take to cover until the investigation was over. All of this work must be done with the utmost secrecy if it is to be effective, and the public cannot be let in on it until it has been done, and the danger eliminated.

However, it may please you to know that since the outbreak of war in Europe there have been several hundred additional G-men appointed, and hundreds of constables throughout the nation are doing nothing but investigating possible saboteurs and foreign spies.

Question: We are all now confronted with the problem of over-expansion. Our men are being called out to service and production is asked to be increased. Don't you think the National Defense Program should assist and help the mills in attempting to remove several of the little government regulations that we have now in the control of learners, in hours, and other things of this nature?

Mr. Mason: I think so and it is my understanding that this will be done. If you have in your mill some large orders you are working on, the Government will probably exempt men who are working for you to carry out those essential orders for the National Defense Program.

David Clark, Editor of Textile Bulletin, Charlotte, N. C.: Isn't it the situation today that some mills are not

trying to learn to make the cloth the government needs, and which they could make and are therefore not doing all they can for defense. I am informed that the War Department is unable to secure prompt delivery on certain goods which they badly need, from mills which normally make such goods but that they could be made by mills which are operating upon print cloths and similar fabrics. Those mills interested in aiding our defense should study War Department fabrics and by placing a few looms upon those they can be prepared for an emergency program.

Mr. Mahon: Yes, sir, that's a very fine suggestion, Mr. Clark. A survey is being made of what mills make, what they can make, their capacity for production of various materials, etc., and this will probably be brought about very soon.

Question: Do you think there is any possibility of labor organizations being a springboard for sabotage in the textile industry and what steps could textile industry take so that they wouldn't be up before the Government in trying to get rid of a bad element in their organization to stop that sabotage? I don't mean to say that all labor organizations should be suspected, or even that any of them should, but if a man is a member of a labor organization we can't fire him without getting into trouble, no matter if we know he is against our government and is likely to give trouble. What can we do about that?

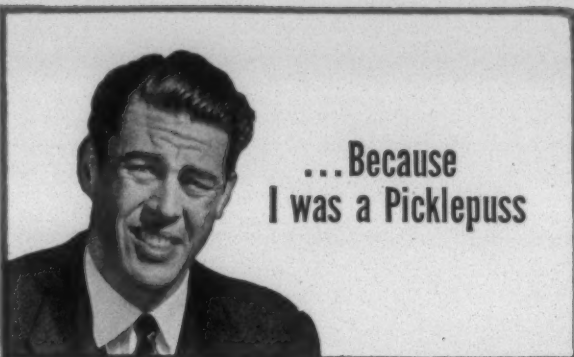
Mr. Mahon: That's a pretty hard question to answer. I think that if I were a textile executive that I would report any suspicious incident or person to the authorities.

A Member: I know a certain mill who had a certain operative in their mill and this man made an expression about our flag that "it wasn't worth a damn and didn't mean anything." In recent months that man was leader of a certain labor organization. If that company had run that man off, and he were to claim he had been run off for union activities, and they believed that, he would have collected a sum of money for that and gotten the mill into a lot of trouble. What are we going to do about that?

Mr. Mahon: I still can't tell you. I do think that law could be revised and I worked toward that while in Washington. I'll tell you what my personal reaction is, and that is that some red-blooded man should have knocked the fellow down! (Applause.) When he became a leader of any group, I think it should have been reported to the District Attorney so that he could have been removed from the scene of trouble. There are some technicalities in the law which I can't answer; but you could report the incident, and could still do it, and see if something can't be done about the man.

David Clark: That was an exceptional case, I believe. The type of man that we have in our cotton mills of the

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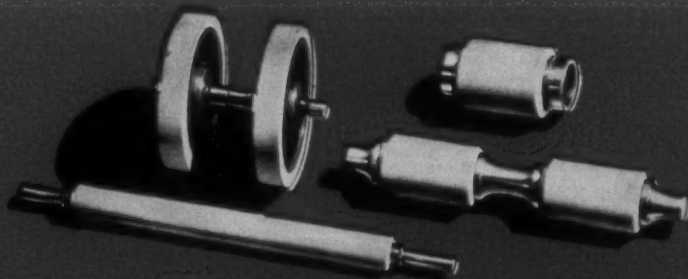
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South are loyal to the United States and I don't think we have anything to worry about from any of our men in the unions, whether the A. F. of L. or the C. I. O., trying to disrupt our organizations through sabotage. Practically every one of our Southern textile operatives are native-born Americans and most of them are of English, Scotch or Irish ancestry. I don't believe we have anything to fear from any of them.

Mr. Mahon: Gentlemen, my time is up, and I'm going to stop talking. I've enjoyed being with you, and wish to commend you on the fine work you are doing.

Chairman Morton: I shall ask this body of men to stand and give a vote of thanks to Mr. Mahon for coming and making us this talk. (Applause.) Some years ago I was working in a plant and the president brought me into his office and said, "I want to show you something." He then showed me through a lot of books with samples of various types of cloths in them and said, "Years ago they said we couldn't make this in the South but we are making it now," and he said that the South's textile mills can make anything anyone else can. We in the Southland are just as intelligent, just as capable, and probably more loyal than the average people over the country. We people of the South don't know how to sneak around and do other things; we're just a blunt people and lots of times get in trouble. When this mill president was talking with me he said, "I was up North trying to sell some goods and the buyers up there showed me some goods and told me that if we could make that kind of goods, they could sell them for us. They said that we didn't have people down here with sense enough to make them. He asked them, 'If I bring goods back like this, will you buy them from me?' and they said, 'Yes.' Five years later he went back with the goods, but they wouldn't believe we had made them in the South. However, they bought them. They were actually made in the Dunbar Mill in Greenville, S. C. I want to say just one or two words before we go into the discussion with regard to meetings; that I have never noticed anyone taking time to do this; and that is, to thank all the textile papers and their representatives who come around and take their time to put down what we say and distribute it around over the country; and the salesmen from different companies who come and mix and mingle with our members. I want to thank them all for coming.

W. W. Splawn will now take charge of the discussion.

Humidity in Card Room

W. W. Splawn, Overseer Spinning, Kendall Co., Pelzer, S. C.: The first questions we have here is "*Do you have humidifiers in card room? If so, what relative humidity do you carry?*" I suppose the majority do have. How many do have? (15 hands raised.) How many don't have? (About three hands.) If you have these, what relative humidity do you try to hold your room?

Mr. Allen: We try to keep ours around 55 or 58.

A Member: We have humidity around 55, but would like to ask if any of your mills have the atomizer system and do you like it better than the spray, or atomizer heads in the card room?

Mr. A.: In connection with that, does anybody have different humidity around roving frames from what they have around cards?

Mr. Splawn: Does anybody have their plant arranged to keep different humidity around cards?

A Member: Yes, sir, we keep ours around 45 around the cards and drawing, and about 55 around the roving frames.

Mr. B.: We try to hold ours from 50 to 55 on cards and 60 to 65 around the roving frames.

Mr. Splawn: What stock are you running?

Mr. B.: That is an inch plus.

Mr. McCrary, Gaffney Mfg. Co., Gaffney, S. C.: We have long draft slubbers in the card room and find that with 52% humidity we get better running conditions on long draft slubbers. We don't have any controls or partitions to keep our slubbers at lower relative humidity but do change nozzles in the atomizer heads. If it gets up around 56 or more we have lap ups.

Mr. Willis: We have a card downstairs and for the past 20 years it has operated under not less than 60 relative humidity. We also have a brand new one, and it will operate under 60. The cloth under the wire on that card has been there about 15 years and I think it is in very good shape. I am citing this merely as an example of cards running under high humidity without damage to the clothing.

Spring Tension Device on Card Calendar Rolls

Mr. Splawn: Our next question is, "*Have you had any experience with the spring tension device on card calendar rolls? If so, with what results?*" I understand that is fairly new. We have had about six. Those who have those in the plant, hold up your hands. (About six hands raised.)

J. Manning Bolt, Gen. Supt., Chadwick-Hoskins Co., Charlotte, N. C.: We had it but don't have it now.

Mr. Splawn: Why, Mr. Bolt?

Mr. Bolt: Because it damaged the fibers of the cotton. The breaking strength went down and we didn't get anything like satisfactory results from it. We would get more sliver in the cans but that is the only thing I can say for it.

Mr. Splawn: Mr. Bolt, about what percentage of gain in putting sliver in can?

Mr. Bolt: I expect 40%, between 30 and 40%.

Mr. Splawn: In this 40%, it seems to me that you would have to have a pretty big difference in your breaking strength to eliminate the whole thing for the gain you get in the capacity of the cans. In other words, it would take a pretty heavy loss in breaking strength to overcome an increase of 40% in the distance between splicings on the drawing frames, and eliminating the troubles from drawing splicings further along in the mill.

Mr. Bolt: We didn't have it on drawing, we had it on cards. It doesn't help you after you get past the drawing. It does help you on drawing but it packs the sliver and in our case we couldn't keep the same tension on all of them. It packed the sliver too hard. Running between these two steel rolls damaged the fibers of the cotton.

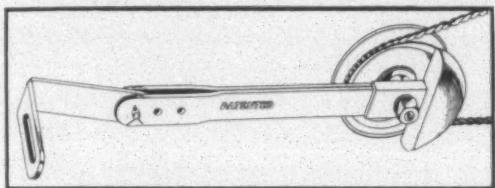
Mr. Splawn: Did it extend your period of creeling time?

Mr. Bolt: It did do that, but the sliver would be so



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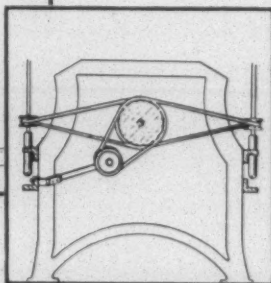
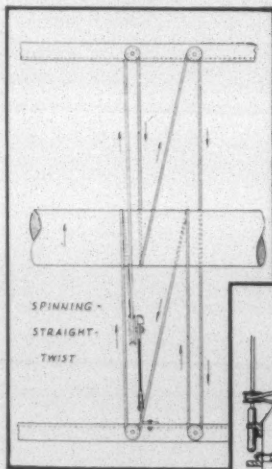


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compressed together that it wouldn't get a good even draft on it. We had more uneven sliver.

Robert T. Stutts, Supt., Woodside Cotton Mills Co., Fountain Inn, and Simpsonville, S. C.: In this connection, why couldn't the same results be obtained, instead of putting the springs on the calender rolls, just reducing the diameter on the trumpet, and compressing the sliver in that manner?

C. W. Wilbanks, Supt., Gayle Plant, Springs Cotton Mills, Chester, S. C.: We tried that but found it wasn't satisfactory. A carder who had reduced all his trumpets, told me they were wearing out and that he had to go back and put springs on his calender rolls. I am trying out the springs. I visited a plant a few weeks ago and saw a test where the carder had all of his cards on it and he showed me the records of what he ran before and after installing the springs and the springs increased his breaking strength ten pounds. Here is what I say about that. If you have a close setting on your rolls, on your drawing and slubbers, very close to the length of your fiber, if you put this spring division on your card you will have to open your rolls on your drawing and slubbers. If you don't, it is going to break the fibers and that means you will have low breaking strength. The fibers are condensed and that makes it harder to draw on your rolls.

Mr. Splawn: What percentage do you think you gained in your cans?

Mr. Wilbanks: About 40%.

Mr. Splawn: From the discussion here this morning it seems that we get anywhere from 20 to 40% gain in yardage in the can through the use of this spring and get anywhere from a large loss to a gain of 10 pounds in breaking strength. With regard to that question, let's go back and consider our own plants, as laboratories for determining the value of using springs on the calender rolls. All of us should at least consider the possibilities of such a spring device, and try it out to see what results we get. When enough of us have tried it, under various conditions, we should be able to arrive at some definite conclusion. If it really is economical we want to know it; if it is not, we want to know that, too.

A Member: I would like to ask you gentlemen, who had that trouble on that spring, what kind of rolls did they use on their drawing frame, covered or metallic?

Mr. Splawn: What about yours, Mr. Wilbanks?

Mr. Wilbanks: We have both.

A Member: Mine were cork.

Mr. Splawn: How much did you have to open your rolls over the staple length of the cotton?

A Member: We haven't gone into that. We only have 14 cards on it, and haven't made any changes in roll settings yet.

Mr. Splawn: Mr. B., how much did you open yours up?

A Member: About a sixteenth.

Mr. Splawn: Have any of you tried using heavier weights on drawing? How many have added extra weight due to that change? (No answers.)

Mr. Splawn: Mr. Lockman, what is your idea about this?

Frank Lockman, Monarch Mills, Lockhart, S. C.: Mr. Chairman, about four months ago I went into a mill and saw them running sliver from the card and it looked like they were trying to make roving there. I asked the superintendent, "What is that?" He said he would show me, and he showed me some springs that they had put on and I got him to give me a set of them and took them home and put them on and in testing that I found it lightened my work. It lightened about a number and I knew I was stretching the yarn. I checked the cans and found that it gave me 40% more yardage in the can. So I decided to modify the thing a little bit, so I ordered springs from the manufacturer and requested that he send the new springs only 75% of the strength of the samples I sent him. I found we got 30% more sliver in the can than we had without the springs. I ran tests on that and still found I was stretching it. So I went ahead and tried to see how we could cut down that stretch. We took off all our calender rolls and turned 8/10ths of 1% of the diameter of each roll. I might mention here that we found some of our rolls larger than others. Some had grooves worn in them. Where we found them too small, we threw them out, made new rolls and put them in. We now have one hundred and fifty-three cards running on it and our experience is that we are getting better breaking strength by about three or four pounds. It will stretch the yarn if you put the springs on there and don't do anything else. I'll tell you one thing, though, it might pay to fix the calender rolls anyway, whether you put on springs or not.

Spring on Front Drawing Rolls

Mr. Splawn: Our next question is as follows: "Have you tried the spring on the front drawing rolls as a cushion for the weight and what results?"

Mr. Lockman: I can't see where we got a great deal of good but anyway we have a spring between the weight and the hanger on each one of our front rolls on the drawing. I am not so sure that we have gotten a great deal of good but it keeps the roller in a uniform revolving condition.

Mr. Splawn: How about wear?

Mr. Lockman: We have only had them on about four months and we have had no undue wear.

A Member: We have just a few frames on as a sample and can't tell much difference in it. We have it on cork rolls, and can't see they are wearing any more or any less.

Mr. Splawn: Our fourth question is, "What causes some of the roving to tangle at top and throw out one or more layers of roving?" All who haven't had any of that trouble, hold up your hands. (One hand raised.) How many have had that trouble, anywhere on a full bobbin? (About 50 hands raised.) Can anyone tell us anything about that, what causes it, and how to eliminate the trouble?

Mr. Lockman: Get some carder to tell us how to stop it.

Mr. Splawn: Has anybody in here had it and stopped it?

Mr. Stutts: I think there are any number of things could cause that. Probably the main reasons will be a

(Continued on Page 42)

ANNOUNCING OUR 1930 — TENTH ANNIVERSARY — 1940

In celebrating our 10th anniversary we extend our sincere thanks to the many textile plants who have helped make possible our record of growth.

Your acceptance of our service has placed our organization in a foremost position as manufacturers of rubber covered rolls for textile finishing.

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We Pause To Wish All Our Friends
A Joyous Christmas and Prosperous New Year.*

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service from convenient stocks*

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Minneapolis

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New York

Kansas City, Kan.

Personal News

H. P. Thomas is now overseer of spinning at the Beaver Mills, Lois plant, Douglasville, Ga.

C. G. White has resigned his position of secretary and assistant treasurer of the Startex Mills, Tucapau, S. C.

W. E. Eubanks has been promoted to day overseer of carding and spinning at the Haleyville, Ala., plant of Alabama Mills, Inc.

E. P. Joyce, of Spartanburg, S. C., has been named to the position of secretary and assistant treasurer of the Startex Mills, Tucapau, S. C.

W. A. Rogers has been promoted from second hand to night overseer of carding and spinning at the Alabama Mills plant at Haleyville, Ala.

Britt Armfield, vice-president of the Armco Finishing Co., Greensboro, N. C., was named chairman of the 1940 Christmas Cheer Fund for Greensboro.

Joe F. Chalmers, superintendent of the Mathews Cotton Mill, Greenwood, S. C., has been named general superintendent of the company, a newly created position.

Lewis N. Peeler, formerly with the Broad River Mills, Blacksburg, S. C., is now overseer of spinning on the second shift at the Carter Mills, Lincolnton, N. C.

W. M. Langley, formerly superintendent of the Abbeville (S. C.) Mills, is now filling a similar position at the Graniteville Co. plant at Warrenville, S. C.

E. W. Mimms, manager of the Jackson County Woolen Mills, Paccagoula, Miss., has resigned. He will in the future be employed in a similar position in Philadelphia.

G. Arthur Cook, superintendent of the West Boylston Mfg. Co., Montgomery, Ala., was a speaker at the recent meeting of the Montgomery Junior Chamber of Commerce. Mr. Cook is vice-president of the Alabama State Chamber of Commerce.

S. W. Page, of Mills Mill, Woodruff, S. C., well known baseball pitcher, was recently married to Miss Adelaide Estelle Kilgore, of Woodruff and Charlotte, N. C.

R. W. Arrington, president of Union Bleachery, Greenville, S. C., is a member of the committee planning the 25th anniversary program of the Greenville Rotary Club, January 7th.

R. L. Stowe, prominent textile executive of Belmont, N. C., was recently re-elected chairman of the Gaston County Board of Commissioners for the nineteenth consecutive time.

W. Irving Bullard, president of the E. H. Jacobs Mfg. Co., Charlotte, N. C., and Danielson, Conn., has been named a member of a special committee to obtain a new auditorium for Charlotte.

James Harold Bateman, of the office staff of the Riverside & Dan River Cotton Mills, Danville, Va., was married recently to Miss Margaret Evelyn Dockery, also connected with the office staff.

Lester C. Gill, Southern sales representative of the Standard-Coosa-Thatcher Co., Chattanooga, Tenn., was married recently to Miss Frances Ellis. They will make their home in Chattanooga.

R. T. LeGrand, secretary and treasurer of the Shelby (N. C.) Cotton Mills, is now able to come to his office for part of each day, having partially recovered from an accident suffered several weeks ago.

P. E. Smith, formerly with Marshall Field & Co., Leaksville, N. C., is now superintendent of the finishing and bleaching departments of the Riverside & Dan River Cotton Mills, Danville, Va.

Basil Browder, formerly superintendent of bleaching and finishing of the Riverside & Dan River Cotton Mills, Danville, Va., has been named assistant to the president of the company.

Fred M. Allen, for several years an executive of the Southern Combed Yarn Spinners' Association, Gastonia, N. C., has been elected secretary and manager of the Lake City and Columbia County Chamber of Commerce, Lake City, Fla.

J. Manning Bolt, formerly general superintendent of Chadwick-Hoskins Co., Charlotte, N. C., has accepted a position as superintendent of the Mathews Cotton Mill, Greenwood, S. C. Mr. Bolt had formerly been superintendent of the Calhoun Mills at Calhoun Falls, S. C., and the Gossett Mill at Williamston, S. C. He was a member of the executive committee of the Piedmont Division of the Southern Textile Association.

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367

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Can be used in
ANY CONDITIONING MACHINE

1 gallon MEON "T" to 99 gallons water

INSURES SMOOTH WEAVING
INCREASES BREAKING STRENGTH
A RUST INHIBITOR
WILL NOT AFFECT THE BOBBINS
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Use it on your Tyeing-in Machine

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John L. Stickley, Southern representative of the William Whitman Co., Charlotte, N. C., has been undergoing treatment at the Charlotte Memorial Hospital. He is now at home, able to spend about three hours a day at the office, and is well on the road to recovery.

Falls L. Thomason, Southern manager of the New York & New Jersey Lubricant Co., manufacturers of Non-Fluid Oil, recently spent a week in the company's main office in New Jersey. He reports good business, and good prospects for the future.

Testimonial Dinner for Kaufmann and Freitag

A colorful testimonial dinner was given by the stockholders of the Steel Heddle Mfg. Co., general offices and main plant at Philadelphia, Pa., on Friday evening, December 6th, at the Warwick Hotel in honor of the 40 years' faithful and uninterrupted service rendered by John J. Kaufmann, president and general manager, and the 30 years rendered by Robert J. Freitag, secretary-treasurer and sales manager.

Attending were about 100 guests, comprising the stockholders and their immediate families.



R. J. Freitag



J. J. Kaufmann

A handsome souvenir book with photographs of all the employees in the branch offices and plants at Philadelphia, Pa., Greenville, S. C., Atlanta, Ga., Greensboro, N. C., Providence, R. I., and Montreal, Canada, was presented to Mr. Kaufmann and Mr. Freitag, illustrating the growth of the company during the 42 years the Steel Heddle Mfg. Co. has been in existence.

Ernest K. Halbach, president of the General Dyestuff Corp. of New York and vice-president of the Steel Heddle Mfg. Co., acted as toastmaster.

John Gwilliam and H. Walford Martin, directors of the company, had charge of the arrangements for the dinner.

Five Textile Leaders Fined \$100 Each

Greenville, S. C.—Five South Carolina textile men, members of a committee in charge of the 1939 summer print cloth production control program, pleaded nolo contendere to charges of violating the Sherman Anti-Trust Act in Greenville Federal Court November 28th and were fined \$100 each by Judge Alva M. Lumpkin, of Columbia, with the observation "if I were on the jury considering the case I probably would be the first to cast a ballot of not guilty."

Nolo contendere means "I will not contest it;" in other words, the defendants did not admit they were criminally guilty but refused to contest the charge.

The defendants were: J. E. Sirrine, Fred W. Symmes and Ellison S. McKissick, of Greenville; David W. Anderson, of Spartanburg, and John B. Harris, of Greenwood.

The bill of information against the defendants charged that they, as a committee, engaged in a combination to restrain trade by inducing print cloth mills representing not less than 95 per cent of all looms operated in the United States on print cloth to take part in a program of reduced production.

The position of the defendants as set forth in a seven-page abridgement of their pleas in court was that the production control program "was born of necessity and conceived and entered into in confidence that it constituted no violation of the anti-trust act."

OBITUARY

DANA H. ALEXANDER

Dana H. Alexander, popular and well known salesman for the Clinton Co., with headquarters in Greenville, S. C., died suddenly of a heart attack recently. Further details will be published in an early issue.

DR. LEMUEL L. SELF

Cherryville, N. C.—Funeral services were held here at the Methodist Church for Dr. Lemuel Lester Self, the president of the Carlton Yarn Mill and the Nuway Spinning Co.

Dr. Self was also a member of the board of the Cherryville National Bank and surgeon for the Seaboard Air Line Railway. He died recently in the Charlotte Eye, Ear and Throat Hospital after several months of declining health.

A. D. WEBSTER

Fayetteville, N. C.—Arthur Davis Webster, an overseer of the Holt-Williamson Cotton Mill here for 28 years, and one of the most prominent textile experts in this section, died at a local hospital recently. Several months ago Mr. Webster retired from active duties on account of his health.

MRS. J. O. PORTER

Porterdale, Ga.—Mrs. J. O. Porter, wife of the recently retired agent of the Bibb Mfg. Co. at Porterdale, died recently in a hospital in Jacksonville, Fla. Mrs. Porter was on her way to Florida to take her daughter, Frances Porter, who had been ill for some time, to a warmer clime, when she was stricken. She lapsed into a coma from which she never recovered.

WALTER L. DAWKINS

Huntersville, N. C.—Walter L. Dawkins, 54, for the past eight years overseer of spinning at the Anchor Mills Co., died suddenly November 23rd from a heart attack.

Mr. Dawkins was well known in the textile industry of this section, and will be missed by his friends.

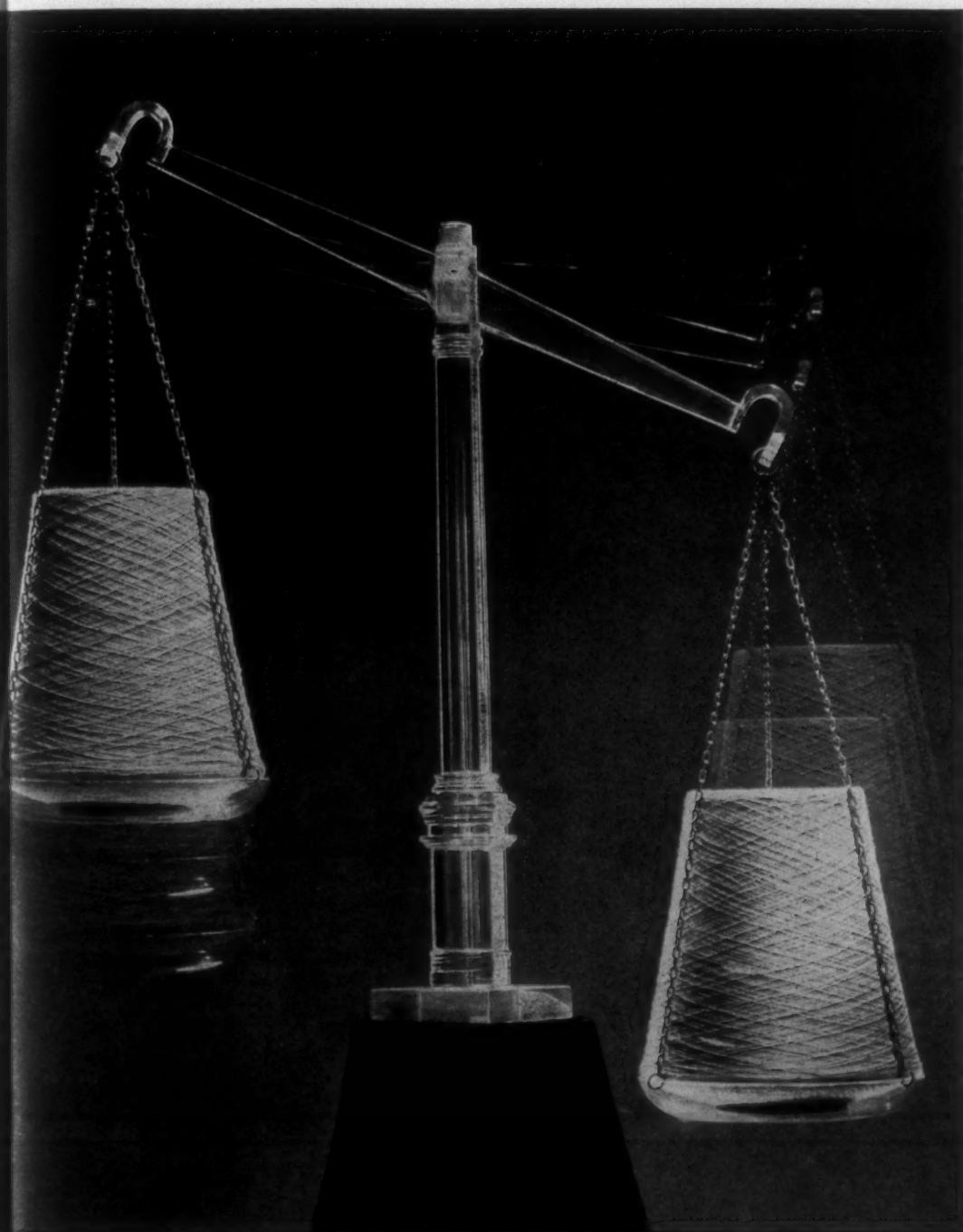
TRITON W-30

tips the balance...

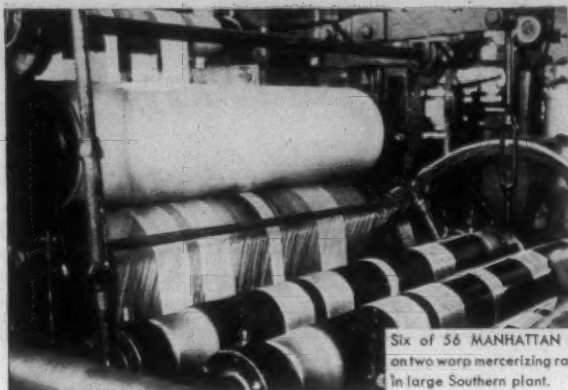
Two yarn packages immersed for equal periods—one in a TRITON W-30 solution—the other in a solution containing another wetting agent. The TRITON W-30 package tips the balance.

Why? Both agents wet rapidly. But TRITON W-30 *wets through*—more water is absorbed. That's the difference. With TRITON W-30 every fiber of the yarn, even at the core of the package, is thoroughly penetrated.

Tip the balance in your favor. Use TRITON W-30 in dyeing, desizing, finishing, and other wetting applications.



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MANHATTAN Rubber Covered Rolls, because of their uniform texture and accurate finish, give satisfactory service on cloth or warp mercerizing ranges, compartment washers, padding and sizing machines.

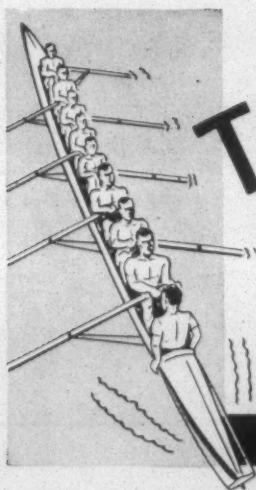
Consult MANHATTAN's Roll Department. Factories at North Charleston, S. C., and Passaic, N. J.

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Asheboro, N. C.

Cone Offices Moved From Greensboro To New York

Greensboro, N. C.—Ben Cone, treasurer of the Cone Export & Commission Co., in making announcement of the consolidation of the Greensboro office with the general sales offices in New York City, said that the company would only maintain a skeleton force here in the printing and sampling departments and that he and Lacy H. Sellers, secretary, would be the only officials who "will continue to maintain offices in Greensboro and to make their residence here."

He said that the move had been considered for many years.

"Detail work in textiles has grown so tremendously in the past few years that consolidation seems to be absolutely essential. It is logical to consolidate the details and sales efforts in the place where sales originate. We feel that we can render much better service to the mills and to our customers by consolidating at the actual headquarters of the industry."

Caron & Patterson, Chicago Yarn Mill Agents, Dissolve

Chicago, Ill.—C. M. Patterson makes known that the partnership of Caron & Patterson, yarn representatives, has been dissolved and he is taking over the representation of five mills and will continue at 222 West Adams, where Caron & Patterson have been for a number of years.

O. J. Caron, who has been ill at home for several months, will continue his activities from Rochelle, Ill., where he has had a yarn plant for many years.

The mills for which Mr. Patterson will take over the representation in this area are Falls Yarn Mills, Woonsocket, R. I., James Lees & Sons, Bridgeport, Pa., Newnan Cotton Mills, Newnan, Ga., New England Spun Silk Corp., Boston, Mass., and A. M. Smyre Mfg. Co., Gastonia, N. C.

The Right Paint for Your Plant

"The Right Paint for Your Plant" is the name of a recent publication of the U. S. Gutta Percha Paint Co., of Providence, R. I. On the inside of the front cover are illustrations of "before and after" painting that show indisputable proof of the value of white paint for industrial plants.

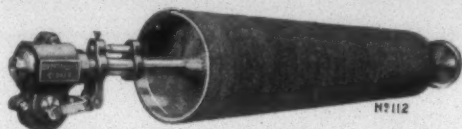
Pointing out the advantages to be derived from the proper use of white paint, the booklet summarizes these advantages into five parts, as follows: 1. Raise production efficiency, 2. Lower factory overhead, 3. Promote safety, 4. Aid sanitation, and 5. Better working conditions.

The remainder of the booklet shows air views or architect's drawings of a number of plants, with statistics on the length of time the plants have used Barreled Sunlight, and in some cases the number of gallons used. For example, one large Southern textile plant has used 90,000 gallons of Barreled Sunlight since 1905.

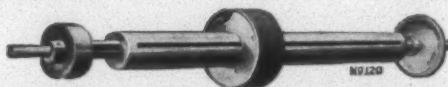
The booklet points out that before any industrial plant embarks on a painting program, a painting specialist should be called in to study the requirements of the particular plant, and to recommend the paint best suited to the conditions as found.

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Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Item pertaining to new mills, extensions, etc., are solicited.

A Worthy but Useless Effort

A suit to test the constitutionality of the National Wages and Hours Law, brought by a group of Alabama cotton mills, has finally reached the United States Supreme Court and was heard during the past week, but in our opinion was a useless effort because a majority of the present Court was appointed because they were supposed to be willing to make decisions without regard for that agreement entered into by the States known as "The Constitution."

The Alabama cotton mills are correct in their contention but they might as well ask Hitler to place a Jew in his Cabinet as to ask the present U. S. Supreme Court to declare unconstitutional a vital piece of New Deal legislation.

The Constitution when first drawn gave to Congress, which was to be the creature, not the master, of the States, certain powers and it was argued that Congress could not exercise any powers except those delegated to it but the people of the several States were not satisfied and refused to ratify until amendments, known as the "Bill of Rights," were agreed upon.

The most important feature of the "Bill of Rights" was the following, or Amendment No. 10, which said:

Power not delegated to the Congress shall be reserved to the States and to the people thereof.

No power to regulate the wages or hours of citizens of a sovereign State has ever been delegated to Congress and when a former Congress attempted to regulate child labor by prohibiting the transportation of goods made by persons under certain ages a United States Supreme Court declared that Congress could not do by indirection that which it had no power to do directly.

The Congress which enacted the Wages and Hours Law might have obtained the right to enact such a law by submitting a constitutional amendment to the States and having it approved by thirty-six States, but they were afraid that the peoples of the States would not be willing to surrender their reserved powers to Congress and therefore decided to steal the powers from them by enacting an illegal law and having it approved by a packed U. S. Supreme Court.

Those who sought control of wages and hours by Congress admit that they could not find in the Constitution itself any authority for Congress but did find in the preamble four words which could be used as a pretext.

We, the people of the United States, in order to form a more perfect Union, establish justice, insure domestic tranquility, provide for the common defense, *promote the general welfare*, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this *Constitution* for the United States of America.

In every State, courts have laid down the principal that, except in case of fraud, when a contract is entered into and signed, preliminary statements or discussions have no effect upon that contract, and if such a private or corporation contract would come before the United States Supreme Court, they would hold the preliminary statements as of no effect.

A "Bill of Rights" amendment to the Constitution specifically stated:

The enumeration in the Constitution of certain rights shall not be construed to deny or disparage others retained by the people.

And as stated above the principal amendment had stated:

Powers not delegated to the Congress are reserved to the States and the people thereof.

Thus the solemn and binding agreement between the States, for the formation of a federation, had stated that powers not delegated to Congress shall remain with the States and that the enumeration in the Constitution of certain rights shall not deny or disparage those retained by the States.

The words "promote the general welfare" which have been used as a pretext to give Congress the power to control wages and hours within the several States, were not a grant of power

but a statement of purpose. They are not in the Constitution itself although they could have been added if the framers had desired. They are merely a part of the preliminary statement of purpose and as such have no legal standing.

However, we realize that we are wasting our time and the time of our readers because the law will be declared constitutional by the present U. S. Supreme Court.

Does Red Cross Aid Nazi?

A North Carolina lady who, with her husband, spent the last seven years in Europe and remained in France after the outbreak of the present war and until October 5th of this year, recently made an interesting address before a civic club in Charlotte.

We were especially interested when she said "The American Red Cross is sending both food and medical supplies to Germany."

The people of the United States have always been willing to contribute to the support of the American Red Cross, but if that organization is sending food and supplies to Germany, it is doing so without the approval of most Americans who are contributing their dollars to its support.

Germany has ruthlessly overrun Poland, Norway, Denmark, the Netherlands, Belgium and France and has taken and is taking seventy-five per cent of the food supplies of those countries and is stripping them of all productive machinery.

Every night German planes fly over the British Isles and drop bombs and fire upon homes which shelter women and children and leave ruins covering mangled bodies.

It is unthinkable to us that under such circumstances, food and medical supplies purchased with money provided by American citizens should be sent to aid people who are supporters of Hitler.

Former President Hoover did a wonderful job in relieving distress in Belgium during the first World War and we can realize that as a result of his experiences he has a deep sympathy for the peoples now suffering in the countries occupied by German soldiers, but we are not in accord with his efforts to send food to the peoples in those sections.

It is hard to allow peoples in those countries to suffer for food, but to give them food will be equivalent to giving supplies to Germany, because the Germans will require of those peoples foods equivalent to those which they receive from America.

Additional food and additional supplies to

Germany mean a longer period of fighting and more attacks upon the British Isles.

In the last analysis, if giving food to occupied areas means saving the lives of persons in those areas, it means also prolongation of air raids over the English with the loss of more lives in that country.

We have a deep sympathy for those who find themselves under the heel of Germany, but if it is a question of their lives or the lives of the people of England who are waging a magnificent battle against aggression and whose success means so much to the future of America, we would turn a deaf ear to their pleas.

The horrors, incident to this war, have not yet been realized in this country, but they can be laid upon the doorstep of Hitler and the German people, and we are opposed to furnishing either food or medical supplies to any persons if such furnishing indirectly aids Germany and helps her prolong this frightful war.

Watch Out for Walsh-Healey Act

With the Government placing large orders for cloths to outfit the Army and Navy, many mills are taking such orders for the first time. It is important that these mills understand that such contracts must be executed according to the provisions set forth in the Walsh-Healey Government Contracts Act, which goes considerably further than the Wage and Hour Law in its provisions for minimum wages and maximum hours.

Under the provisions of this act, workers on Government contracts must be paid a minimum wage of 35 cents per hour, instead of the 32½ cents required by the Wage and Hour Law. Also, where the Wage and Hour Law requires the payment of time and a half for overtime only after 40 hours' work in one week, the Walsh-Healey Act states that time and a half must be paid after more than 8 hours' work in any one day. There are special records to be kept and other requirements to be met.

We advise any mill that is doing Government work to make a careful study of the Walsh-Healey Act, and to be sure that all of the conditions of the Act are being followed to the letter. Otherwise, the additional business which has resulted from Governmental purchasing may prove to be a boomerang, and result in penalties that will wipe out any hope of profits.

As an example of what can happen, a Southern cotton mill that had been doing quite a bit of Government contract work for several years was this year ordered to pay in the neighborhood of \$50,000 in back wages and penalties for violation of the Walsh-Healey Act.

Mill News

GASTONIA, N. C.—The Arkray plant of Textiles, Inc., has given a contract for a one-story addition to its mill structure, to cost about \$25,000.

ASHEVILLE, N. C.—Fire in a warehouse of the Beacon Mrg Co., at Swannanoa, near here, destroyed an estimated \$25,000 in finished blankets.

No damage was done to the plant or other warehouses.

DUNN, N. C.—The King Cotton Garment Co. is opening a manufacturing plant shortly to make a line of children's overalls and play suits. The daily output is expected to be 100 dozen at the start which is expected to increase to 250 dozen within a few months.

MT. AIRY, N. C.—A certificate of incorporation has been filed for Davis Mills, Inc., principal office Mt. Airy, to manufacture yarn and all kinds of textile fabrics. Authorized capital stock 500 shares of A stock par value \$100 and 650 shares of B stock with no par value, 3 shares subscribed, by R. B. Davis, Pilot Mountain, N. C.; A. A. Fowler, Mt. Airy, N. C., and Ethel B. Fowler, Mt. Airy.

CORNELIUS, N. C.—The Cornelius Cotton Mills, which have been idle for some months, will resume operations just as soon as the organization can be gotten together and the necessary changes made in the machinery to change the mill over from a weave mill to a yarn mill.

O. L. Wagstaff, superintendent of the Anchor Mills Co., of Huntersville, N. C., will act as superintendent of the Cornelius Mills. O. L. Wagstaff, Jr., will be assistant superintendent.

UNION, S. C.—The Excelsior Mills, manufacturers of wide sheeting, and one of the county's oldest textile plants, will be sold lock, stock and barrel, at public outcry here December 18th, by W. S. Nicholson, receiver.

The principal items include 110 acres, 58 frame dwellings, three brick factory buildings, one two-story brick school building, a community house, office, also looms and hosiery machines.

Bidders will be required to deposit with the receiver a check for \$5,000. Two days after the sale the successful bidder must pay \$25,000, and pay the remainder of the purchase price within 30 days from date of sale.

The mill has not operated for several months, closing down, the management said, because of a stagnant cloth market.

LYNCHBURG, VA.—Demurrers have been filed in Corporation Court here by Hampton Looms of Virginia, Inc., and Robert C. Atherholt, defendants in a suit instituted by James Owen Watts, Jr., statutory receiver of Bedford-Johnson Co., Inc.

Named at the request of minority stockholders in the Bedford-Johnson concern, which formerly manufactured

pants in Lynchburg and woolen cloth in Bedford, Va., Mr. Watts is seeking the recovery of \$453,000 worth of Hampton Looms stock with interest and dividends, or its equivalent in cash.

The stock formerly belonged to Bedford-Johnson, but, according to allegations of the receiver, it was transferred on July 10, 1933, to Charles J. Webb & Co., Inc., of Philadelphia, for \$90,000 to apply against a \$201,000 judgment, the latter secured against Bedford-Johnson.

BANNING, GA.—Unnamed New York textile interests are preparing to place the former plant of defunct Banning Mills, Inc., in operation at once, with a back-log of cotton yarn orders indicating that capacity production, employing 175 workers, will eventually be in effect.

Lease of the plant site, building and real estate and installation of new new machinery at Banning was confirmed at Athens by George Upchurch, secretary of C. L. Upchurch & Sons, who bought the properties at a receivership sale last summer for \$40,250, dismantling equipment and selling it elsewhere. The lessors have a 10-year lease with option to buy.

Included in the lease are two-score cottages for workmen. The Upchurch firm is completing installation of new machinery.

GREENSBORO, N. C.—Burlington Mills Corp., with principal offices in Greensboro, and operating plants in more than ten towns in North Carolina, and several in Virginia and Tennessee, announces the filing with the Securities and Exchange Commission, Washington, D. C., of a registration statement covering 800,000 shares of cumulative convertible preferred stock, with a dividend rate of \$2.75. The statement also covers 190,477 shares of common stock of \$1 par value reserved for conversion of the preferred. The preferred stock will be convertible into common stock, now listed on the New York Stock Exchange, at a price of \$21 per share for the common stock.

The proceeds from sale of the preferred stock, estimated at \$3,840,000, are expected to be expended approximately as follows:

Four hundred thousand dollars for improvements and additions to present plants; approximately

Eight hundred and seventy-five thousand dollars for purchase of looms;

Five hundred and sixty thousand for purchase of throwing spindles and hosiery machinery;

Seventy-five thousand dollars for cottages for employees;

Seventy-five thousand dollars for acquisition of an additional hosiery finishing plant.

In addition to being reputedly the largest weaver of rayon goods in the world, the company manufactures full fashioned silk hosiery, spins both rayon and cotton yarns, and mixtures, and dyes and finishes a wide variety of cloth and knitted fabrics.

DYEING AND FINISHING

Raw Stock Cotton Dyeing

By D. C. Quillen

ONE of the most important things in making satisfactory raw stock dyeings is to get started right.

Probably first on the list in getting started right is to be sure that the cotton is ripe, because green cotton is sure to result in faulty dyeing. Another point that is worthy of consideration, and which has been receiving attention to some extent in recent years, is to try to get cotton from the same locality as far as is practicable. While dyers have known this for a long time, recent tests conducted by the Government have shown that even when the same type seeds are planted, cotton from different localities shows widely varying characteristics. This is due to differences in soil content, weather conditions, and methods of handling. The ideal situation would be for the raw stock dyer to start with properly aged cotton from the same general vicinity.

The cotton should, for best results, be well ginned, with as much of the motes, leaves and dirt removed as possible. These points are frequently not given enough weight by the mill when purchasing cotton, and the result is that the dyer must take any sort of cotton, often green and dirty, and do the best he can with it. He is more or less behind the eight ball before he even gets the cotton into the machines.

The three types of machines in general use are the open type circulating machine, the closed type circulating machine, and the rotary machine. Whatever the type of machine, it is most important that the cotton be properly loaded, and not packed too tightly, so that the dye liquors can thoroughly penetrate to all parts of the load. Otherwise, even though the various batches are later blended together, there is the likelihood of bars appearing in the finished cloth if the cotton is used for filling yarn.

Before the cotton is dyed, it should first be thoroughly wet out, so that the dyestuffs can penetrate into the fiber. This wetting out process causes the removal of some or all of the gums, pectins, etc., from the outer surface of the cotton, which normally prevents dye penetration. There are on the market a number of prepared wetting out agents that have excellent penetrating and detergent properties. Generally the loaded machine is filled with water, the penetrant added and the temperature raised to 140-200 degrees Fahrenheit, and maintained at this temperature for from one-half to one hour.

It is best to have one man designated as drug weigher, rather than letting more than one person weigh out the dyestuffs and chemicals that are used. If one man is designated for this job there is eliminated the possibility of one man weighing "light" while another weighs "heavy," and the result being variations in shades in what should be identical formulae. Also of great importance, and a point that is many times overlooked, is the accuracy and dependability of the scales in use at the dyehouse. Good scales are a good investment, and they should be checked at regular intervals to assure their accuracy in weighing out dyestuffs and chemicals. What good is a laboratory match, where analytical balances are used in weighing, if the formula is taken to the dyehouse and the dyes weighed out on scales that are from 30 to 40 per cent off. Don't think that some mills are not guilty of this practice. They are.

The simplest dyes to apply are the ordinary direct dyes and the direct dyeing fast-to-light colors, which I will discuss shortly here. After the dyestuff has been weighed out, it is then boiled up. When doing this don't be afraid of using too much water. To get the dyestuff in solution get the water as near the boiling point as possible and hold it there for at least five minutes; it is then ready to turn into the machine. It is best to let the dye into the machine slowly, in order to give it a chance to gradually penetrate into the fibers. It is a good idea to turn in about half the dye and let it run for approximately five minutes, then turn in the other half and run the entire amount for from 20 to 30 minutes at 190-200 degrees Fahrenheit. Salt the dyeing out by adding anywhere from 10 per cent to 40 per cent salt, in solution, depending on the requirements. This should be added in portions, as in the case of the dye, depending on the shade. If the shade is light, add the salt solution in lots of one-fourth the total amount, at five-minute intervals. If the shade is heavy the salt may be added one-half at a time.

Another point to remember in adding the salt solution is the rate of exhaustion of the colors in combination. If colors in combination exhaust slowly after salting, the salt may be added one-half at a time. If there is one color that exhausts much faster in combination, the salt should be added slowly. After all the salt has been added, the entire solution is allowed to circulate for five to ten minutes longer. The dye is then allowed to drain off.

Cold rinses are given until the water is fairly clear. This generally takes from one to three rinses. It has been found that just a plain 10 per cent salt rinse in the last bath is beneficial in making the dyed cotton run better in the card room. There are also some very good finishing agents on the market that are applied after the cotton is dyed to soften it and improve the running of the cotton in the mill.

One thing that will help the mill is for the dyer and card room overseer to work hand-in-hand in attempting to eliminate troubles in raw stock dyed cotton. There is entirely too much passing the buck between these two departments generally. Frequently the dye house foreman feels that the card room overseer is not really trying to run the cotton properly, while the card room overseer feels that all of the fault lies with the dyer and the chemicals and dyes he uses in the preparation of the cotton. It is to the advantage of the mill if these two men can get together and discuss their problems rationally and in an effort to iron out the difficulties to the mutual advantage of both.

After the cotton is treated with either the salt rinse or finishing agents, it is removed from the raw stock machine, extracted, and put through the dryer. Proper packing of the wet cotton in the extractor is important, in order to get maximum extraction in the shortest time. The more water taken from the cotton at the extractor, the shorter will be the time required in the dryer, and the more cotton can be put through the dyehouse in a day or shift. Of course, this is a problem that must be worked out by the individual mill in relation to the equipment it has available.

There are other types of colors that are first dyed the same as the directs, but are given various aftertreatments to give better fastness properties. One of these types, fairly new, is the type of color known as the Formaldehyde colors. These will stand the Number 1 A.A.T.C.C. wash test and show very little staining with .5 per cent soap at 120 degrees Fahrenheit. These colors are after-treated in the following manner: After the dye has been dropped and the material rinsed, the machine is filled up again and heated to 140-150 degrees F. 3 per cent formaldehyde (40%) is added and allowed to run for 30 minutes. This solution is then dropped and two 10-minute washes at 160 degrees F. are given. The bath is dropped, the cotton unloaded from the machine, extracted and dried in the usual manner.

Another type of color is the diazotized and developed color. These are also dyed initially the same as the directs and fast to light colors. The bath is dropped and the machine is cooled down to 60-70 degrees F. with rinse, or sometimes ice is used. Be sure that all parts of the machine are at this temperature. This includes all the cotton, the sides of the machines and also the pumps. Be sure there are no leaking steam valves on the lines going into the machines. In 30 minutes just a small leak can raise the temperature from 70 degrees F. to around 85 degrees F., which is 15 degrees higher than it should be.

After the machine is cold dissolve 3% sodium nitrite in cold water. Add this to the machine and circulate for 5 minutes. Then add 5% sulfuric or 6% hydrochloric acid to the bath and allow this to run 25 minutes (total 30 minutes). Drop the nitrite and acid bath and rinse

cold until all the acid and nitrite are out. Then fill machine and keep temperature at 60-70 degrees F. The dye is now ready for developing. There are various developers used. Some colors require certain developers to get a true shade. Other dyes can be developed with any of the developers. This is governed by the desired shade as to what developers are used.

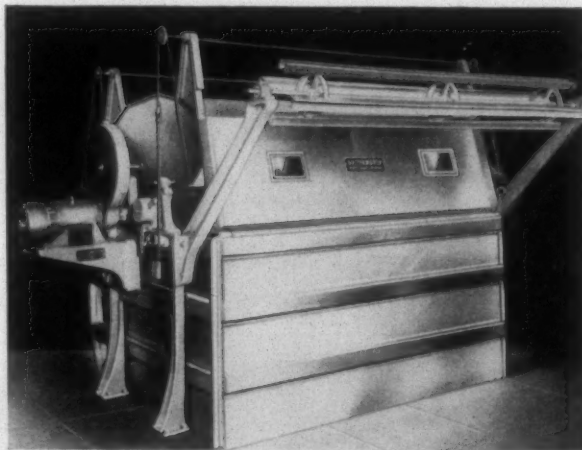
After the developer is made up it is added to the machine and allowed to circulate for 30 minutes. The bath is dropped and rinsed once cold, then it is given two hot rinses at 160-170 degrees F. and one soaping at 160-170 degrees F. using $\frac{1}{2}$ -1% of the higher soaps that are on the market. Drop this bath and give one rinse at 160-170 F. degrees. Drop, extract and dry. The advantage of the diazotized and developed colors is that as a group they have very good wash fastness.

The above paragraphs have been given in an attempt to point out some of the small points and to give a general idea as to how some of the colors are handled in a raw stock dyeing plant.

New Reel Dye Kettle

A new Reel Dye Kettle recently developed by H. W. Butterworth & Sons Co., Philadelphia, is said to be proving its effectiveness in many mills that dye wool and cotton fabrics in the piece.

This new machine is said to help to avoid production losses by assuring true colors from the start. The stain-



less steel construction results in a quicker rinse with no wasted time between lots.

The tub of the Butterworth Reel Dye Kettle is self supporting and seats on foundation below floor level. Drive is fully enclosed gear reduction motor. The machine is equipped with an idler reel and an unloading device with automatic stop motion.

Some of the New Dyestuffs

GENERAL DYESTUFF offers Alizarine Blue SAPR, an acid dyeing Alizarine color which yields bright shades of a reddish blue, for dyeing of worsted piece goods, hats, carpets and knitting yarns.

Benzoform Green GA, a direct dyestuff recommended for application on cotton and particularly on rayon. Discharged to good white with either neutral or alkaline

pastes. Useful for union dyeing.

Immedial New Blue FBLA Extra CF, a sulphur color to yield very bright shades of blue. Very good fastness to light, to washing and to hot pressing, good fastness to fulling, storing and mercerizing. Recommended for cotton and rayon.

Benzo Viscose Blue GS Conc., a direct color recommended for use on cotton and, in particular, on rayon. Attractive bright shade, comparatively good wash fastness and good dischargeability. Stains acetate rayon effects slightly and silk effects heavily.

Benzoform Grey N, a direct dyestuff recommended for cotton and particularly on rayon. When aftertreated with formaldehyde and acetic acid in the way usual for Benzoforms, it is said to produce dyeings of good fastness to washing, to fresh and salt water, and to perspiration.

DUPONT DYESTUFFS offers Polyform Dark Maroon GF, a member of a new group of direct dyestuffs designed to be obtained with a simple after-treatment with formaldehyde. Recommended for production of solid shades on viscose process rayon and cotton in the form of staple, rawstock, yarn or piece-goods.

Polyform Dark Brown 3BF, a direct dyestuff possessing wash fastness comparable to that of the developed colors, with aftertreatment of formaldehyde. Recommended for uses similar to developed colors, and especially suited to production of ground shades for discharge purposes on viscose process rayon. Rather bluish shades of brown.

CALCO offers Chrome Yellow CGW-100%, an economical, easily applied yellow dye for wool. Specially recommended for use with army colors. Flexible in use; may be applied by top-chrome, meta-chrome or the bottom chrome methods, with slight or no variation in shade.

Calomine Garnet BY Conc., a claret colored direct dyestuff, for dyeing of cotton and rayon. Also for use on wool to produce wine and old rose shades.

New Resin Finish

A new resin for textile finishing with the elastic qualities of rubber latex has recently been announced by the Rohm & Haas Co. of Philadelphia. While similar to latex in its elastic properties, this new resin is said to have advantages in that it does not oxidize with age; it does not develop an odor; and does not cause discoloration of the fabric. The new type resin can be used in concentrated form for coatings on fabrics, or in more dilute form for impregnating fabrics to produce a variety of unusual finishing effects.

The new elastic resin is a modification of the acrylate or RHoplex type. Like the other acrylate resins, the new product will be sold as a concentrated aqueous dispersion. Like the other resins, the new elastic resin is said to produce films that are tough and durable, colorless, odorless, and require no curing or special handling.

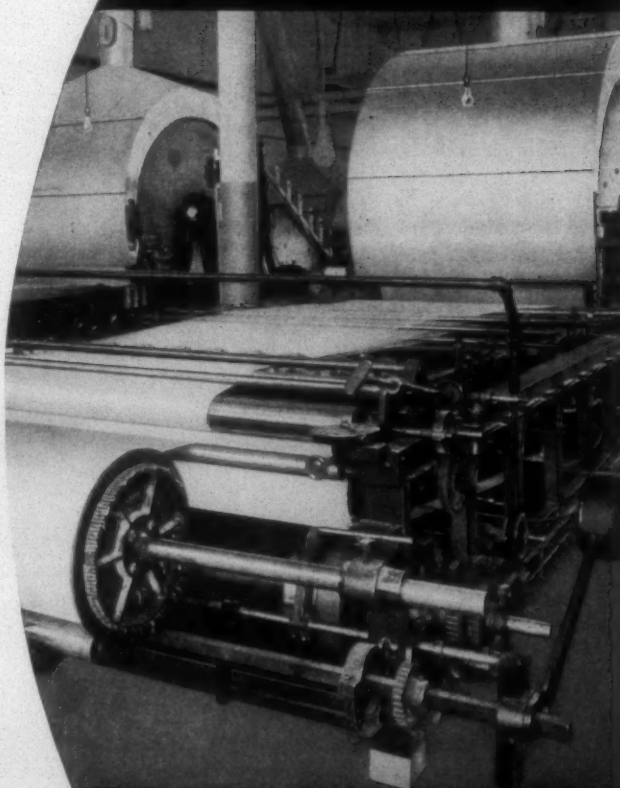
Three grades of the new elastic resin are available: Soft, medium, and hard. The softest resin in the series is the most elastic and rubber-like. While it is soft, it is not tacky. Films formed by this resin do not soften with heat or become brittle and hard when cold. The soft resin in the series is claimed as an excellent coating material for fabrics for producing tough, elastic films.

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The medium grade resin produces a firmer and drier film that is not quite as elastic. This resin can be blended with the softer resin to obtain intermediate effects. The medium resin is said to produce excellent coating effects, as well as a variety of unusual fabric finishing effects on rayons and cottons.

The hardest resin in the series is outstanding for its complete resistance to solvents, according to the company. In low concentrations this product is said to produce unique finishes on spun rayon fabrics, as well as unusually soft, full, non-slip finishes on rayon satins and taffetas.

Technical Bulletins On Creaseproofing

Two technical bulletins, Nos. 552 and 558, on the use of Aerotex Cream No. 450 for creaseproofing, are currently being distributed by the Calco Chemical Division, American Cyanamid Co.

These two bulletins have been prepared to meet a wider demand for information on creaseproofing. Following the lead of some of the large finishers, others have discovered that many fabrics are rendered more salable by the application of a creaseproofing finish. Department stores and other retail outlets are finding an increased demand on the part of the consumer for material treated in this manner. This pressure has been felt particularly with such materials as spun rayons, spun rayon and cotton, spun and acetate rayon, spun rayon and wool, cotton voile and linen.

According to Calco's Technical Bulletin No. 558, Aerotex Cream No. 450 can be applied to all of these fabrics. This same bulletin describes in detail suggested methods of applying this creaseproofing compound.

New Lubricant

Borne Scrymser Company, manufacturers of lubricants since 1874, are now offering for the lubrication of ball and roller bearings, on machinery operating at temperatures from 0° to 500° F. their Mased Lubricant No. 177. At room temperature it is of a buttery consistency.

A portion of the company's announcement follows:

"A simple laboratory test shows this new lubricant superior to other greases for the lubrication of ball and roller bearings, particularly those operating under high temperature conditions. Place in the center of an electric hot plate, a piece about the size of a pea of any grease. It will be observed that the grease will quickly melt and run away. Under similar conditions Mased Lubricant No. 177 does not liquify, but retains its buttery-like consistency."

Advantages in Improved Methods of Drying Textiles

New York.—Recent advances in the drying of textiles have resulted in saving floor space and other economies as well as improving the condition of dried cotton, due to shorter exposure to heat, Fred Kershaw, Proctor & Schwartz, Inc., Philadelphia, told the textile section of the sixty-first meeting of the American Society of Mechanical Engineers at the Hotel Astor.

Mr. Kershaw pointed out that the most modern type of raw stock drier cotton is being dried in 1¼ minutes, one-eighth of the former time.

In one case, he stated, a modern drier, replacing one only 15 years old, effected savings enough during its first year's operation to pay for the installation three times over. Similar results were also reported in woolen, cotton-linters, and staple-rayon industries.

At the society's annual dinner William A. Hanley, of Indianapolis, was elected national president for 1940-41.

Mr. Hanley and other new officers were installed at the A.S.M.E. Council meeting at the national headquarters of the society at 29 West 39th Street. Mr. Hanley is a director and head of the engineering division, Eli Lilly & Co., Indianapolis.

The three new vice-presidents are Dean Samuel B. Earle, of Clemson A. & M. College, Clemson, S. C.; Frank H. Prouty, of the Industrial Appraisal Commission, Dencer, Col.; and Edwin B. Ricketts, mechanical engineer with the Consolidated Edison Co. The vice-presidents were elected to terms of two years.

Perrin N. Collier Re-elected by Southeast Section A. A. T. C. C.

Atlanta, Ga.—Perrin N. Collier, vice-president and director of research of Callaway Mills, LaGrange, Ga., was re-elected chairman of the Southeastern Section of the American Association of Textile Chemists and Colorists at its annual meeting in Atlanta December 10th. Leslie L. Bamberger, purchasing agent, Lanett (Ala.) Bleachery & Dye Works, was re-elected vice-chairman.

The following three officers were also re-elected: Curt Mueller, superintendent of dyeing and polishing, Bibb Mfg. Co., Macon, Ga., as secretary; A. R. Macormac, textile department, Alabama Polytechnic Institute, Auburn, Ala., as treasurer, and Robert W. Phillip, editor of *Cotton*, Atlanta, as councilor.

A new sectional committee was named, consisting of the following: George L. Dozier, Sandoz Chemical Works, Marietta, Ga.; W. B. Griffin, Kail Mfg. Co., Atlanta, Ga.; John P. Harrison, Supt., Muscogee Mfg. Co., Columbus, Ga.; W. C. Hunter, Supt. Dyeing, Eagle & Phenix Mills, Columbus; M. T. Johnson, Supt. Dyeing, Hillside Plant, Callaway Mills, LaGrange; R. J. McCamy, Supt. Dyeing, Pepperell Mfg. Co., Lindale, Ga.; George E. Missbach, F. H. Ross & Co., Atlanta; J. W. Richardson, Supt. Bleaching, Russell Mfg. Co., Alexander City, Ala.

George H. Small, of National Oil Products Co., reported as chairman of the section's delegation to the annual convention in New York, October 18th-18th. Secretary Mueller, Treasurer Macormac, and Councilor Phillip reported to their respective offices during the year.

The speakers at the meeting were Dr. Karl Reiland, formerly rector of St. George's Episcopal Church, New York City, and now a part-time resident of Lindale, Ga., and Vice-Chairman Bamber, who presented the section's paper, "Some Observations on the Tendering of Vat and Naphthol Dyed Army Duck Upon Total Exposure to Weathering," which was awarded second prize in the national contest at the association's New York convention.

There were 103 members and guests of the section present.

Index To Advertisers

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

A—	Page	K—	Page
American Cyanamid & Chemical Corp. —	—	Keeper Starch Co. —	49
American Moistening Co. —	—	Kempton Parts & Spring Co. —	42
American Viscose Co. —	—		
Armstrong Cork Co. —	—	L—	
Arnold, Hoffman & Co., Inc. —	—	Laurel Soap Mfg. Co., Inc. —	—
Ashville Hotel —	—	Hotel Lincoln —	52
Ashworth Bros. —	25	Link-Belt Co. —	—
Auffmordt, C. A. —	45	Loper, Ralph E. —	—
		M—	
B—		Manhattan Rubber Co. —	28
Baily, Joshua L. & Co. —	40	McIntyre Co. —	53
Bancroft Belting Co. —	—	Meadows Mfg. Co. —	21
Barber-Colman Co. —	5	Mecklenburg Hotel —	—
Barkley Machine Works —	—	Merrow Machine Co., The —	42
Barnes Textile Associates —	43	Mill Devices Co. —	—
Borne, Scrymser Co. —	25	Montgomery & Crawford —	55
Brooklyn Perfex Corp. —	39	Moreland Sizing Co. —	—
		N—	
C—		National Aniline & Chemical Co. —	—
Carolina Loom Reed Co. —	50	National Lead Co. —	—
Carolina Refractories Co. —	59	National Oil Products Co. —	—
Carolina Rubber Hose Co. —	23	National Ring Traveler Co. —	51
Carter Traveler Co. —	—	New Departure Mfg. Co. —	—
Charlotte Chemical Laboratories, Inc. —	59	N. Y. & N. J. Lubricant Co. —	—
Charlotte Leather Belting Co. —	45	Norlander Machine Co. —	—
Clba Co., Inc. —	—	Norma-Hoffmann Bearings Corp. —	43
Clark Publishing Co. —	—		
Clinton Co. —	25	O—	
Corn Products Refining Co. —	35	Old Dominion Box Co., Inc. —	28
Cundiff, John O. —	—	Onyx Oil & Chemical Co. —	44
Curran & Barry —	40		
Curtis & Marble Machine Co. —	—	P—	
Cutler Co., Roger W. —	—	Pabst Sales Co. —	—
		Parks-Cramer Co. —	43
D—		Pawtucket Spinning Ring Co. —	43
Dary Ring Traveler Co. —	45	Pease, J. N. & Co. —	—
Daughtry Sheet Metal Co. —	39	Penick & Ford —	—
Dayton Rubber Mfg. Co. —	19	Powers Regulator Co. —	—
Detergent Products Co. —	—	Proctor & Schwartz —	44
Detex Watchclock Co. —	—	Provident Life & Accident Ins. Co. —	—
Diehl Mfg. Co. —	42		Front Cover
Dillard Paper Co. —	—	R—	
Dixon Lubricating Saddle Co. —	48	Rice Dobby Chain Co. —	51
Drake Corporation —	—	Rohm & Haas Co. —	27
Draper Corporation —	4	Roy, B. S. & Son Co. —	23
Dronsfield Bros. —	29		
Dunkle & Co., Paul A. —	50	S—	
Dunning & Boschert Press Co. —	38	Saco-Lowell Shops —	2
DuPont de Nemours, E. I. & Co. —	—	Sargent's Sons Corp., C. G. —	—
Fine Chemicals Dept. —	—	Seydel-Woolley Co. —	—
R. & H. Dept. —	—	Sirrine & Co., J. E. —	45
Dyestuff Division —	—	Socony-Vacuum Oil Co. —	12 and 13
		Solvay Sales Corp. —	—
E—		Sonoco Products —	—
Eagle Roller Repair Works —	41	Southern Ry. —	—
Eaton, Paul B. —	39	Southern Spindle & Flyer Co. —	48
Emmons Loom Harness Co. —	3	Southern Standard Mill Supply Co. —	—
Engineering Sales Co. —	55	Staley Sales Corp. —	—
Excelsior Mills —	46	Steel Heddle Mfg. Co. —	—
		Stein, Hall & Co. —	—
F—		Sterling Ring Traveler Co. —	29
Foster Machine Co. —	—	Stevens, J. P. & Co., Inc. —	40
Benjamin Franklin Hotel —	—	Stodghill & Co. —	—
Fulton Bag & Cotton Mills —	43		
		T—	
G—		Terrell Machine Co. —	48 and 50
Garland Mfg. Co. —	40	Texas Co., The —	—
Gastonia Brush Co. —	52	Textile-Finishing Machinery Co. —	—
General Coal Co. —	—	Todd, Inc., F. C. —	47
General Dyestuff Corp. —	17		
General Electric Co. —	—	U—	
George Machine Works, W. J. —	36	U S Bobbin & Shuttle Co. —	—
Gill Leather Co. —	—	U. S. Ring Traveler Co. —	41
Greenville Belting Co. —	39	Universal Winding Co. —	6
Grinnell Co. —	—		
Gulf Refining Co. —	—	V—	
		Valentine & Co., J. W. —	—
H—		Vanderbilt Hotel —	59
H & B American Machine Co. —	—	Veeder-Root, Inc. —	—
Hart Products Corp. —	—	Victor Ring Traveler Co. —	29
Houghton, E. F. & Co. —	—	Vogel, Joseph A. Co. —	59
Houghton Wool Co. —	24		
Howard Bros. Mfg. Co. —	11	W—	
		WAK, Inc. —	38
I—		Walker Mfg. Co. —	29
Ideal Machine Co. —	—	Warwick Chemical Co. —	—
Iselin-Jefferson Co. —	—	Watson-Williams Mfg. Co. —	—
		Wellington, Sears Co. —	40
J—		White & Co., G. A. —	—
Jacobs, E. H. Mfg. Co., Inc. —	—	Whitin Machine Works —	15
Jenkins Metal Co. —	—	Whitinsville Spinning Ring Co. —	59
Johnson Chemical Co. —	—	Windle & Co., J. H. —	—
		Wolf, Jacques & Co. —	—

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MEN WANTED

North Carolina mill wants Master Mechanic with several years' experience in mechanical and electrical engineering between 35 and 50 years of age, in good health. Also section man between 27 and 40 to run combination job on beam warping, winding, spooling and twisting.

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Care Textile Bulletin.

N. C. Mill Accidents Decline

Charlotte, N. C.—The fifth annual State-wide textile safety contest conducted by the North Carolina Cotton Manufacturers' Association resulted in a considerable decrease in lost-time accidents, said Hunter Marshall, Jr., secretary and treasurer of the organization.

Mr. Marshall explained that this decrease not only meant a great saving to the workers in wages lost and suffering caused by accidents, but also brought the manufacturers a reduction of 16 2-3 per cent in insurance rates for cotton spinning and weaving in comparison with those of 1936.

He pointed out that, based on total cotton textile insurance premiums paid on spinning and weaving during 1938 and assuming that during both 1936 and 1940 the total payrolls were the same, this reduction in rates will have resulted in a saving to the textile industry of \$48,952 in premiums annually.

Figures show that the 262 plants completing this contest operated a total of 126,221,117 man-hours at an average of 11.34 lost-time accidents per million man-hours. These plants employed a total of 104,145 employees.

Thirty-six of these 262 plants operated a total of 7,065,094 man-hours from January to August, 1940, without a single lost-time accident.

Trophies in the contest were won as follows: group one, for 200 employees or less, the Erwin Cotton Mills Co., of Durham; group two, 201 to 400 employees, Greensboro Weaving Co., Greensboro; group three, 401 to 750 employees, Roxboro Cotton Mills, Roxboro; group four, 751 employees or more, No. 4 mill of Mooresville Cotton Mills at Mooresville.



Tenth Anniversary of Carolina Rubber Hose Co.

The Carolina Rubber Hose Co., of Salisbury, N. C., is celebrating its tenth anniversary. Organized by Miles J. Smith, who is and has been its president, the company was organized to manufacture rubber and covered rolls for use in the textile industry and rubber hose for railroads. The plant is shown above.

The business has grown constantly since its inception at a time when the textile finishing plants were beginning to expand in the South, and from a beginning of 75 per

cent railroad hose and 25 per cent textile rolls, the company has changed into a complete reversal of 75 per cent textile rolls and 25 per cent railroad hose.

The company now manufactures many types of rolls used in the textile industry, including water squeeze, jig, backfiller, expander, wool scouring, acid squeeze, and carbonizing.

In addition to roll covering, the company also furnishes rubber lining for tanks, rubber lined pipe and fittings, rubber plugs for tanks, rubber tires for hand trucks, and a number of other items.

NLRB Stand On "Free Speech" Case Upheld

Washington, D. C.—The Supreme Court has refused to review a Labor Board order which contended that the right of free speech "does not comprehend the right to engage in unfair labor practices," and in another labor case refused to enjoin milk store picketing in Chicago.

In the first case, the court refused to review—and thereby left in effect—a Labor Board order holding that

the Elkland (Pa.) Leather Co. had committed an unfair labor practice by giving its employees, along with their pay checks, a written statement announcing an open-shop policy. The court, as is customary, did not give its grounds for refusing to review the order.

In the picketing decision, Justice Black said the Federal Circuit Court at Chicago "was in error" in concluding that the picketing activities "constituted a secondary boycott in violation of the Sherman Anti-Trust Act, and that for this reason, regardless of the Norris-La Guardia Act, the District Court had jurisdiction to grant an injunction even though the case arose out of or involved a labor dispute."

Black said the Norris-La Guardia Act limited the granting of an injunction in labor cases.

"The Norris-La Guardia Act, passed in 1932," Black continued, "is the culmination of a bitter political, social and economic controversy extending over half a century. Hostility to 'government by injunction' had become the rallying slogan of many and varied groups." . . .

"For us to hold, in the face of this legislation, that the Federal Courts have jurisdiction to grant injunctions in cases growing out of labor disputes, merely because alleged violations of the Sherman Act are involved, would run counter to the plain mandate of the act and would reverse the declared purpose of Congress.

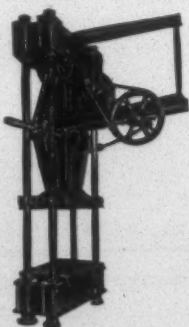
"The Circuit Court of Appeals was in error; its judgment is reversed and the judgment of the District Court dismissing the bill for injunction is affirmed."

The Circuit Court had ruled that the acts of the union constituted an unlawful secondary boycott designed to "destroy the business" of the dairy. A secondary boycott is not directly against the producer of a product but against those who sell the product to the public.

No dissent from Justice Black's opinion was announced.

Also, the tribunal declined to review a decision holding that the Labor Board may certify as a collective bargaining agency a labor organization which received a majority of the votes cast in an election, even though less than a majority of those eligible to vote had participated.

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8 8x3½ Saco-Lowell and 3 Lowell Speeders.
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All of this machinery in good condition and priced reasonably.

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LOCATE PERSONS

Mrs. T. H. Nettles, of R. F. D., Gloster, Miss., now 31 years old and with a family of her own, is trying to locate her parents, J. H. Barfield and Minnie Ella Barfield. Mrs. Nettles was placed in a Methodist Orphanage in Jackson, Miss., when an infant. She has heard that her parents are working in a Southern cotton mill. Anyone knowing of their whereabouts please notify her at above address.

POSITION WANTED—Plant management or assistant to busy textile executive. Thoroughly experienced in cotton, spun rayon and filament rayon manufacture and sales. New York market experience. Available on short notice. Textile School graduate. Address "Experienced," care Textile Bulletin.

AVAILABLE—Graduate of well known Southern Textile School. Age 32, 10 years' diversified supervisory both white and colored work, also laboratory and specification work. Now employed as superintendent but desire change. Will consider anything, go anywhere, native American. Address "625," care Textile Bulletin.

WANTED—Position as Cloth Room Overseer. Now employed, 18 years' experience as inspector, second hand and overseer, sheetings, ducks, drill, twills, sateen, moleskin and other styles. Can handle help. Best of references. Address "18," care Textile Bulletin.

Awarded Patent On Drawing Frame

An American patent, No. 2,223,589, covering a "drawing frame for treating vegetable, animal or artificial fibers of varying length" has been granted to Jan Weinberger, assignor of 25 per cent to St. George Textile Corp. Three claims are allowed.

In the patent one of the claims is described as follows:

"In cotton spinning machinery for working on fibers of varying lengths with the long fibers of much greater length than standard cotton fibers, said machinery including a cotton drawing frame having a ring roller substituted for the top roller of the pair of rollers preceding the front rollers of the frame is to form a slide field for long fibers between the pressing rollers and front rollers and acting to control and feed the shorter fibers through said field to the front rollers, said ring roller being formed of edge abutting rings disposed at an angle to the longitudinal axis of the ring roller and individually movable in paths at acute angles diametrically of the ring roller without changing the overall length of the ring roller."

\$15,000 Paid By Mill Clubs in Spartanburg

Spartanburg, S. C.—Approximately \$15,000 in Christmas Club checks has been distributed by two textile plants in Spartanburg County.

This amount boosts the total of Christmas Clubs distributed in this county in recent weeks to \$133,000, the Citizens & Southern National Bank, the Commercial National Bank and Powell Knitting Mill having already paid off accounts.

Around 200 employees of Inman Mill received about \$13,000 in club checks while at Arkwright Mill approximately \$2,000 was distributed to around 60 persons.

Over 3,000 persons have received Christmas Club checks in this area in the last two weeks.

Over 200 accounts will be paid out by Riverside Mill next Thursday when around \$12,000 will be distributed.

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Cotton Goods Markets

New York.—All indications point toward the most active year in the history of the textile industry before the bell tolls for the end of 1940. Estimates by merchants indicate a production of something like nine and a half million square yards of goods, which will establish a record over the 9,356,805,000 square yards of cloth produced in 1937.

Military buying has undoubtedly been the spur that has produced this unprecedented volume of buying. While it in itself has been formidable, the incentive toward ordinary domestic buying has been greatly expanded by the possibility of a shortage of normally easily procured goods.

The Army Depot at Jeffersonville, Ind., has invited bids on approximately 10,000,000 yards of cotton khaki tent duck. Bids will be opened on December 18th and awards will be made shortly thereafter. Army officials asked that deliveries be made as soon as practicable but added that all shipments must be completed before May 30th.

Mills are not only asked to submit bids on the standard 29½-inch 15.5-ounce finished Army duck, but are also permitted to name prices on a wide variety of flat ducks. The fact that the Army has seen fit to include flat ducks in this invitation was sufficient to strengthen prices considerably. It was known for several weeks that the Army would take action favorable to the one division of the duck trade that has not benefited to any extent from defense purchases. As a result, demand for flat cloths began to broaden and mills moved substantial quantities.

There has been talk in the market of just how much textile buying by the defense forces will develop over the next few months. The common belief is that purchases of most types of cotton goods for use by the Army and Navy is ahead of schedule and that purchasing will begin to taper off shortly. A number of merchants are of the opinion that there will be little if any buying of military supplies in the second quarter of next year, although mills are likely to continue busy during that period on contracts placed some time before. Duck mills, of course, are assured of fairly heavy production for the first six months of next year on the basis of current unfilled orders.

Most mills are comfortably sold ahead, and prices are likely to go higher if any shortages develop.

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Cotton Yarn Markets

Philadelphia.—Cotton yarn sales have been so good in the past few months that it is now being reported reliably that possibly December will be the smallest month recently as regards sales.

In some quarters, distributors claim that they have nothing more to offer for the deliveries now being sought. The tendency is to regard 1940 as already ended and yarns are being quoted independently of immediate conditions of supply and demand. Increasingly, sale yarn is available from secondary sellers for the wanted deliveries, at lower rates than are quoted by most spinners.

However, there are suppliers who report no difficulty in locating yarn to fill the deliveries asked for. But they state that customers more often balk at paying full quotations, apparently on the expectation that this month tradition will be followed in this respect and that some bargains may be had later on from those who would like to keep some yarn moving regularly.

Cotton yarn consumers have reached the time of year when normally they are covered with yarn sufficient for known needs for all or part of the next quarter. Their custom then is to defer new buying until after their year-end inventory figures are available, and, in some cases, to postpone the taking-in of yarns already contracted for.

Very little is heard from the latter at the present time, but some sections of the sale yarn list are reflecting the unwillingness of yarn consumers in these lines to enter into new commitments in December, especially as this would imply, in some cases, covering that would be entirely anticipatory.

As compared with a year ago, the yarn market is strong in this respect—that unsold stocks in spinners' and distributors' inventories at the end of this month probably will be materially smaller, and as very few consumers can be said to have covered liberally beyond March for protective purposes, general buying of sale yarn can be expected to resume at the November rate soon after the turn of the year.

In parts of the sale yarn list, prices have become narrowly irregular, especially in yarns used exclusively for civilian purposes, but also including certain of the single combed peeler and the two-ply carded and combed counts. This amounts simply to shading of prices by a number of sellers, including some of the spinners, so as to fill in some orders to dispose of production that was kept open for the accommodation of regular customers.

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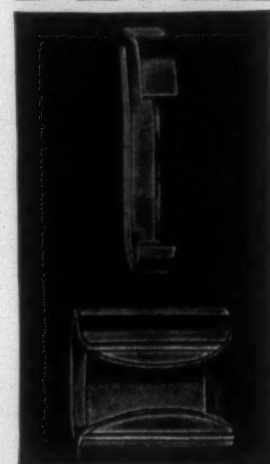
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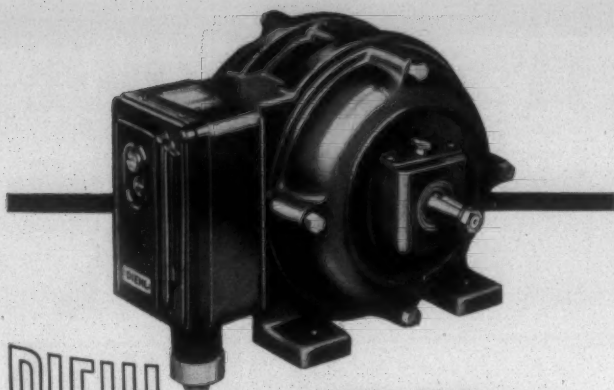
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S. C. Mill Men Discuss National Defense

(Continued from Page 22)

worn builder, a worn dog or jumping bobbin gear. Possibly those would be some of the most frequent causes.

A Member: I think the direct cause to that is an improper tapering to start with in the cones, and failing to produce exactly the same amount of tension on the bobbin from beginning to end.

Mr. Splawn: These are two of the causes, I know, and have stopped two of them. The tapering was too much at an angle. Let's go on to Question No. 5, "What yardage do you get on 30's warp, with a 1-13/16" ring, 8 1/2" bobbin?"

A Member: We get around 3600, on the light side of 30's No. 1 flange, 1-13/16" ring.

Mr. C.: We get about 3850 yards on 1 3/4" ring.

Mr. D.: On our 1-13/16" ring, it varies from 3600 to 3900. At 1 7/8" it goes up as high as 3900 to 4350.

Mr. Morton: We have a 8 1/2" bobbin, 1-13/16" ring and the last test showed 4700 yards, running around 31's yarn.

Mr. Splawn: How do you do that?

Mr. Morton: Well, we put on a heavier traveler, changed all my strokes to what they should be without sloughing off. We were running 6 1/4 hours on the doff and now run 7 hours and 10 minutes and are hoping to go to 7 hours and 15 minutes and stop there. Ours is a combination wind.

Mr. Splawn: What size bobbin do you use?

Mr. Morton: No. 1 flange and about 7/8" bobbin, 8 1/2" long.

Mr. Splawn: What do you set your stroke at, the first traverse?

Mr. Morton: 5".

Mr. Splawn: Won't that fill up a 1-13/16" ring before it gets to the top?

Mr. Morton: We are running three shifts on some of it, and on one or two occasions it has filled up and rubbed the ring on the third shift. We found so far on the other two shifts, they have not had any of that but we had a weak doffer on the third shift.

Mr. Splawn: What lay gear do you have on your spinning frames and what kind are they?

Mr. Morton: 19-tooth, Saco-Lowell frames.

Mr. Splawn: What model frames?

Mr. Morton: 1938, I believe it is.

Mr. Splawn: The last part of Question 5 is, "What yardage do you get on 40's filling with a 1 3/8" ring, 8" bobbin?"

Mr. Lockman: I believe we had better start with Mr. Morton on that.

Mr. Morton: We are not doing a big job on that. We have old rings, and are not able to put heavy enough traveler on that to draw it down like it ought to be. We are getting about 2300 yards to the bobbin.

Mr. Splawn: No. 40 filling?

Mr. Morton: Yes, sir.

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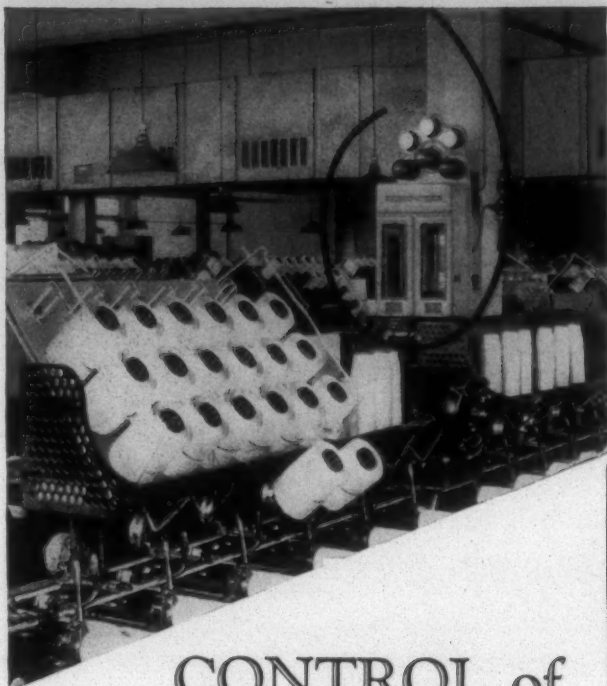
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Mr. Splawn: What size quills?

Mr. Morton: 8" quills.

John Lockman: We get about 2500 yards of 40's on an 8" quill, 1 3/8" ring. You know about a year ago the whole industry went wild on big packages and started in the card room first. They cut down on their tapering and that is one thing that causes all of this tangled roving we have. We make around 2500 yards on filling on 8" quill.

Mr. Splawn: That's pretty good yardage for 8" quill, 40's yarn, 1 3/8" ring.

Mr. Morton: What are you getting, Mr. Splawn?

Mr. Splawn: It will vary. That variation gives us more trouble than anything else.

John Lockman: Do you or not have more trouble on Monday or Tuesday than any other day in the week about fluffed-off filling?

Mr. Splawn: Personally, I would think that the average mill would have more trouble on Mondays.

F. D. Lockman: We have more trouble on Monday.

Mr. Splawn: Anyone else? Has anybody in here been able to best 2500 yards of 40's filling on a 1 3/8" ring, 8" quill?

A Member: Not if they run an X Model loom in the weave room.

Mr. Splawn: Question No. 6, "How many use mechanical cleaners on spinning?" (Ten hands raised.)

A Member: Our carder tells us that all of the roving we have to rope off and tangle or loop up in the spinning creel is the result of the overhead cleaners blowing the roving off the bobbin.

Mr. D.: Go down in the card room and look in the box and you will find out different. (Laughter.)

A Member: There is more than one thing that will cause that. Seeing is believing, and I have watched it happen. A blower will blow a layer off the roving bobbin. That will happen. The same thing will happen in the card room if you don't start the roving tight on the bobbin and you can't do that on a new bobbin. The same thing will happen if a bobbin is jumping. It will also happen if there is too much lost motion in the builder shaft. Too much taper on one end than on the other will cause it. But the card room don't cause all of it. (Laughter.)

Mr. Splawn: I know it isn't all in the card room but I have walked up to the elevator and tried to catch it and keep it away from the spinning creels.

A Member: I would hate to have air enough to blow the roving off my bobbins. I'm afraid I wouldn't have it long.

Mr. Splawn: Let's take up Question No. 7 now: "How often do you change travelers on 30's warp and 40's filling?" How many do not change travelers? (Ten or 12 hands raised.)

Mr. E.: I change about every four weeks on 40's.

Mr. Splawn: How often do you change them on 30's warp?

Mr. E.: Every 120 hours.

Mr. F.: I have made quite a number of tests and found

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that by changing travelers about every three weeks on 30's, we don't have any flying off and you should change the travelers on filling regardless of the kind of rings you have.

Mr. Splawn: Any comments on that? Are you running two or three shifts?

Mr. F.: Two shifts, 80 hours a week.

Mr. Splawn: That would be 240 hours period, wouldn't it?

Mr. F.: Yes, sir.

Mr. Splawn: 120 and 240 hours is a pretty big difference there.

Mr. Stutts: Persons on rayon that are making 30's, should those travelers be changed any oftener?

A Member: I have never gotten rayon travelers to run over four days. (Laughter.)

Mr. G.: I am running a No. 2 ring and usually our travelers limit our speed. I am running three full shifts at the present time and we change every 60 hours. Our numbers are heavy though and our travelers don't run off.

Mr. Splawn: Travelers have greatly improved in the

last ten years and speeds have gone up and size of the ring has been increased.

A Member: If you are using your traveler cleaners to good advantage, how much longer will your travelers run?

Mr. Splawn: I might state the gentleman's question like this, how many in the house when going over your frames, use a gauge or something to set their traveler cleaners, or consider it that important?

A Member: Up until recently I had one that didn't need any setting.

Mr. Splawn: That is a cleaner with a ring that goes around the holder and under the ring, isn't it? It is called a Knight cleaner. In changing travelers, have you noticed any difference in the life of travelers? It seems that most of them in here have been giving cleaning travelers attention. If you didn't have a traveler cleaner, how many of you would go to the expense of putting it on? (About 20 raised their hands.)

Mr. H.: I don't think you could very well get along without it. You get much longer life on your travelers. I believe from my experience, it is a paying proposition and not only that, you will take a lot of work off your spinners.

NOTICE OF RECEIVER'S SALE of EXCELSIOR MILLS

Pursuant to the authority and direction contained in an Order of the Court of Common Pleas for Union County, State of South Carolina, signed by Hon. E. C. Dennis, on November 25th, 1940, and filed November 26th, 1940, in the case of Deering-Milliken Company, Inc., Plaintiff, vs. Excelsior Mills, Defendant, the undersigned Receiver will sell at public outcry before the Court House at Union, South Carolina, at 11 o'clock A. M., on December 18th, 1940, to the highest bidder, for cash

ALL THE PROPERTY OF EXCELSIOR MILLS, INCLUDING LAND, BUILDINGS, MACHINERY, STOCK IN PROCESS, SUPPLIES, MANUFACTURED GOODS, COTTON, CHOSES IN ACTION, AND ALL OTHER PROPERTY OF SAID EXCELSIOR MILLS, EXCEPT CASH ON HAND OR IN THE BANK.

The principal items of real estate, buildings, etc., are briefly described as follows:

All that certain tract or parcel of land in Union School District, in the City of Union, County of Union, and State of South Carolina, bounded on the North by West Cohen Street and Going's Estate lands, on the East by South Church Street, on the Southeast and South by Hart Street, and on the West by property of C. D. Blalock and the Greer lands, containing 110 acres, more or less, but excluding from said tract of land 39 lots and 38 buildings heretofore sold to individual purchasers, for which deeds have been executed and delivered.

1 Standard type 2-story brick factory building, approximately 203 feet by 78 feet, containing 11,568 spindles and complementary machinery.

1 Standard type 3-story reinforced concrete, steel sash factory building, approximately 145 feet by 115 feet, containing 416 40-inch Draper E Model looms and complementary machinery, and 12 24-section 42-gauge Wildman Leggers, and 3 24-section 42-gauge Wildman Footers and complementary equipment for the making of full fashioned hosiery.

1 Standard type 1-story factory building 75 feet by 121 feet, with basement.

1 Machine Shop.

1 Boiler House.

1 Brick Coal Pocket.

1 1-story Frame Waste House.

1 2-story brick School Building, containing two rooms, hall and auditorium.

1 Frame Warehouse, 2 sections, divided by brick fire wall, 32 feet by 142 feet, with basement under each section.

1 Frame Opening Room 32 feet by 60 feet by 25 feet by 42 feet.

1 1-story Brick Office Building 50 feet by 34 feet.

1 50,000 gallon steel sprinkler tank.

1 180,000 gallon concrete reservoir.

58 Frame Dwelling Houses and one dwelling house used as a storage house, and one community house.

Inventories of the supplies, cotton, stock in process, manufactured goods and all other personal property will be furnished and announced at the sale and made available for prospective bidders, complete in every detail and as accurate as possible as required by the Order of Sale.

IT IS A CONDITION OF THE SALE THAT THE PURCHASER SHALL NOT BE ENTITLED TO ANY MONEY IN THE HANDS OF THE RECEIVER OR IN THE BANK TO HIS CREDIT BUT SHALL BE ENTITLED TO ALL OTHER PROPERTY ON HAND AT THE TIME WHEN POSSESSION IS TURNED OVER TO HIM, AND IT IS THE INTENTION OF THIS SALE TO SELL AND DISPOSE OF ALL OF THE ASSETS OF EVERY NATURE AND DESCRIPTION OF SAID COMPANY OTHER THAN MONEY ON HAND OR IN THE BANK.

Any one desiring to bid at the sale shall first deposit with the Receiver a cashier's check or a certified check on some bank of good standing made payable to the Receiver in the sum of not less than \$5,000.

The successful bidder shall be required to deposit within two (2) days thereafter the further sum of \$25,000, and pay the remainder of the purchase price within thirty (30) days from date of said sale. Qualifying checks of unsuccessful bidders will be returned to them at the close of the sale.

Should the successful bidder fail to complete compliance the property will be resold on the same terms on some succeeding Wednesday after readvertisement as directed in said Order.

Any party to the action may bid and become the purchaser.

W. S. NICHOLSON,
As Receiver for Excelsior Mills.

Erecting, Overhauling and Fixing Looms

(Continued from Page 14)

To check and fix a loom to eliminate filling breakage on the transfer, proceed in the following manner: First, remove all excessive lost motion from the crank arm and the rocker shaft. *Then make sure that the loom is picking on exactly top center position of the crank arm, from the battery end.* This is vitally necessary.

Put the shuttle in the battery end with the transfer mechanism engaged indicating a transfer. Remove the top holder and dispense with it entirely. Remove the transfer hammer and build up, by welding, then grind and shape the hammer as shown in Figure 6-X. This also is vitally necessary.

Replace the transfer hammer and turn the lay to extreme front center position, with the transfer mechanism engaged, and the transfer hammer at its lowest position against the bobbin in the shuttle. Adjust the eccentric pins in the crank arms to position the lay to give about $3/16$ of an inch clearance between the back side of the transfer hammer and the back wall of the shuttle, as indicated by X mark in Figure 4 X. Then regulate the depth of the transfer hammer in relation to the bobbin in shuttle. This is determined by the speed of the loom.

With the transfer still down, line the transfer fork with the bobbin in the shuttle and bend, if necessary, the transfer fork upward to allow the small end of bobbin to be raised $3/4$ to 1 inch before contacting the fork. This is also vitally necessary. Pull the lay back to bottom center position and line empty bobbin in the battery with the transfer fork. Always use a rather tight transfer hammer spring.

The Reasons Why

It is impossible to maintain accurate control of the transfer mechanism with excessive lost motion in either the crank arms or the rocker shaft, as the depth which the transfer hammer travels on the transfer is dependent

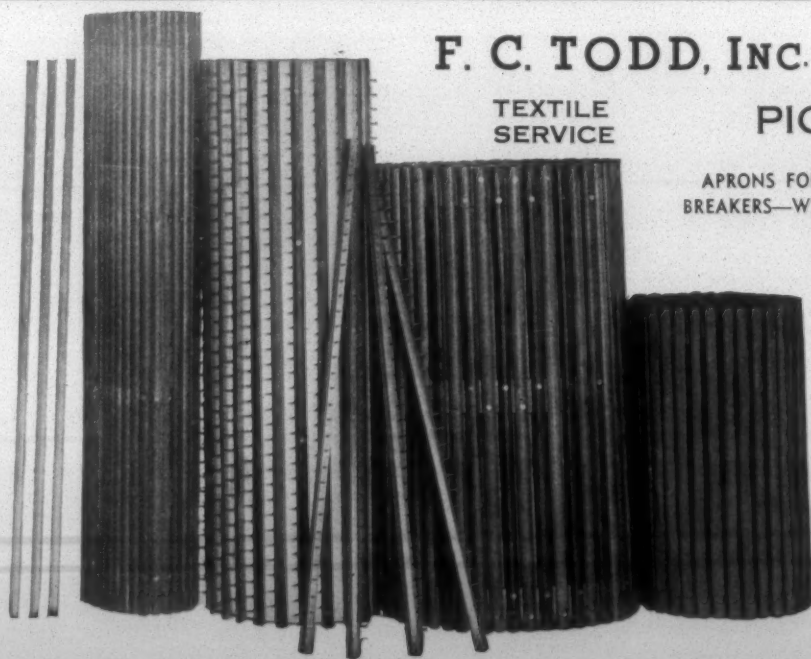
on the position of the lay, and a fixed position of the lay cannot be maintained when there is excessive lost motion in either the crank arms or the rocker shaft.

I have never considered the top holder an absolutely necessary part of the transfer mechanism, and as the loom builders have discontinued the use of it on their late model looms, I accept this as conclusive proof.

By a close study of Figure 5-X it will readily be seen why it is necessary to have a smooth face on the transfer hammer where it contacts the ingoing bobbin. Figure 5-X shows the correct relative positions of the ingoing and outgoing bobbins when the transfer is made. The ingoing bobbin, No. 2, should contact the outgoing bobbin, No. 1, behind the first ring as shown. This is true provided the shuttle is all the way up in the box and all three of the rings on bobbin are caught in the shuttle spring.

The transfer hammer, No. 3, Figure 5-X, is of course in a permanently fixed position, and the bobbin in the battery is in a fixed position, therefore they will contact each other at the same point on each transfer. The shuttle is not in a permanently fixed position, but will continue to move deeper into the box as the picker wears. Therefore it is impossible to prevent the ingoing bobbin from striking the slide strap in the shuttle, No. 5, Figure 5-X, and when the bobbin is forced to slide down into place in the shuttle, one of two things must happen—the bobbin must slide one way on the hammer, or the shuttle must slide the opposite direction in the box, and in either event the first ring on the ingoing bobbin will strike the projection on the transfer hammer, indicated by X mark, Figure 5-X, consequently the small end of the bobbin will be snapped downward momentarily and the filling will be broken while transfer is being made. The projection, or high part of the transfer hammer, contacts the bobbin which, of course, is wood; therefore it never becomes excessively worn, but the low part of the hammer contacts the rings on bobbin, which are of very hard material, and

(Continued on Page 50)



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Glancing Back at the Textile Industry in the First World War

(Continued from Page 8)

Flax

Linen thread is required for sewing all kinds of leather goods and canvas equipment. It is quite superior to cotton both on account of its strength and durability and because moisture causes it to swell and fill out the hole made by the needle in sewing.

This country imports most of its flax. A shortage was anticipated from the start. An admixture of hemp to the flax was tried and to a limited extent was successful. Cotton thread was used as a substitute, also with limited success. The use of flax for linen cloth was practically eliminated during the war. It was a struggle to obtain enough of the Irish fibre to produce a good thread. Restrictions in the civilian use of flax gave rise to several interesting problems. All fine gill fishing nets have to be made of linen because it gives strength without bulk and is much less visible to a fish than cotton or other lines. A great shortage of fishing nets developed toward the autumn of 1918. About the time of the armistice, nets began to arrive.

Jute, Hemp and Cordage

Upon the declaration of war, cordage and twines of all descriptions, from wrapping cord and linen thread to the heaviest marine cordage, were in immediate demand in extraordinary quantities. The British controlled the jute fibre and the burlap manufactured from it. Immense quantities of burlap, jute cordage and raw jute were consumed in packing of materials. Sugar, flour, meal, rice, potatoes, nuts, beans, grain, seeds, coffee, wool, fertilizer are packed in burlap for shipping. Gunny cloth is used in baling cotton. In June, 1916, the British Government placed an embargo on the exportation of jute and jute products. Prices were practically fixed at Calcutta by the jute merchants. The January, 1915, price was 4.45 cents per yard; by late October, 1918, it was 15.05 cents per yard, having reached a high of 22.69. Only by agreements, high prices and special arrangement for freight space was burlap secured. As a measure of conserving burlap, the manufacture of linoleum was curtailed to 40% of the 1917 production.

Practically the only substitute for Mexican sisal used in the manufacture of binder twine is Manila hemp. Manila hemp, the chief material for heavy marine cordage, oil well cables, transmission rope, etc., is raised exclusively in the Philippines.

The uncertainty of shipping brought high prices. Approximately 14,000,000 pounds of Manila rope, 2,500,000 pounds of halter rope and 2,000,000 pounds of binder twine was manufactured.

The experience of 1917 and 1918 was a lesson in the time it takes to determine types, create designs, provide facilities and establish manufacture. These years will forever stand as a monument to the American genius of workshop and factory.

In the words of Confucius, "Study the past, if you would divine the future."

Industrial Mobilization During World War One

An obvious fact to be faced is that the United States

was thoroughly unprepared with no inventory of its needs and little understanding of the gigantic task it faced to equip a large army at the time this nation entered World War I on April 6, 1917. One of the first and most important problems was to put the War Department's house in order. It was known that until such time as specifications, drawings and requirements could be effectively presented to the producing industries, it would be useless to call upon manufacturers to organize for production. Throughout the country there was little interest in, and practically no knowledge of, the production of war materials by 95% of American industry. The mobilization of industry was not speedily solved, principally because of the lack of preparation for undertakings of such demands and magnitude. The immediate problem was to divert and almost revolutionize resources and industry for the needs of a large army. The voluntary enlistment of factories in the production of war supplies was induced on the part of the government by means of an offer of high prices and large profits. Wild competition for war needs between all the supply branches, unaware of the immensity of their requirements, caused a horrible condition of affairs. The different supply branches of the War Department, totally disregarding each other's needs, were competing against each other in the procurement of supplies. A sensation was thus created in the winter of 1917 because the country felt the supply program of the War Department had broken down.

The Council of National Defense, by means of its subcommittees and "dollar-a-year men" (prominent by reason of their previous efficiency), gained immediate contact with the commercial world and fathered the powerful War Industries Board. This board was reorganized March 4, 1918, as a separate administrative agency directly under the President, with Bernard M. Baruch as chairman. The new board, plenipotentiary in character, co-ordinated and controlled resources, industry and transportation so as to produce an adequate flow of supply to the Army and Navy. In its deliberations representatives from the Army

took part and controlled for the service.

The real backbone of the board lay in its commodity sections, obtaining expert information, making contact with the industries and purchasing agents alike, receiving suggestions, requests and complaints, and directing the enforcement of regulations and control. The War Service Committees were of indispensable value to the commodity sections and industry.

Priority was accorded to the services of war so that the necessities would have right of way. It is well to note that President Wilson definitely centralized the priorities function in the chairman of the War Industries Board in the following language: "(5) the determination, whenever necessary, of priorities of production and of delivery and of the proportions of any given article to be made immediately accessible to the several purchasing agencies when the supply of that article is insufficient either temporarily or permanently."

Mill Owner Difficulties

The textile mill owner was brought into production on strange woven fabrics, with little or no knowledge of the difficulties arising from government contracts. The low cost producer learned first and as the demands for quantity production became heavier and heavier, the high cost producer came into the picture. Many were sub-contractors to those who had hung on around Washington to get contracts without any factories of their own to make the fabric. The lack of knowledge and understanding of what was wanted and its immediate and violent need was filled with destructive qualities to both the mill owner and the government.

Chokes in production were numerous. Time, which cannot be appropriated by Congress and which faultily lost cannot be gained again, brought many unnecessary headaches and losses to both mill owner and the government. Here are a few "shocks" that the mill owner was

(Continued on Page 52)

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Erecting, Overhauling and Fixing Looms

(Continued from Page 47)

wears very fast, and this within itself will naturally incline the small end of the bobbin downward. This projection was put on the transfer hammer to aid in controlling the bobbin while transfer is being made, but due to quick and excessive wear on the low part of hammer, and the absence of wear on the high part, and the fact that we cannot maintain a permanently fixed position of the shuttle in the box at all times the idea absolutely defeats its own purpose.

The best and most permanent way to fix the hammer to correct the trouble for an enduring time is to remove the hammer and build up, by welding, the low part, using the hardest material obtainable, and then grind it down flush with the high part. *Filling breakage on the transfer positively cannot be stopped with this projection remaining on the transfer hammer*, at least for any length of time.

The correct positioning of the lay is important, otherwise the ingoing bobbin will strike the front or back wall of the shuttle and be rolled into place in shuttle and thereby cause filling to be broken occasionally.

The transfer fork should be lined with the bobbin in the shuttle so that the ingoing bobbin will contact the outgoing bobbin squarely, otherwise control of the ingoing bobbin will sometimes be lost resulting in broken filling, or possibly hung, or broken bobbin, or bursted shuttle. The transfer fork should contact the small end of the bobbin $\frac{3}{4}$ to 1 inch later than the transfer hammer contacts the rings on the bobbin. This will allow the small end of the bobbin to incline upwards while the transfer is being made, this is very important.

Sometimes the bobbin will turn or roll in the battery while the loom is running and the strand of filling extending from the bobbin to the thread guide will be broken before the transfer is ever started. This is caused by wear on the bobbin disc drum, and bobbin disc drum shaft, which allows the bobbin disc to incline inward at the bottom and rest against the battery or hopper stand, thereby throwing the rings on the bobbin in battery out of line with the grooves in the bobbin guide, and this, coupled with the natural vibration of the loom while running, causes the bobbin to turn.

If the feed or hold back pawls are badly worn they should be replaced. If they are not excessively worn and there is too much lost motion or vibration in the bobbin disc, this can be corrected by removing the transfer hammer and filing it at the point where it contacts the battery or hopper stand. It is rather expensive to replace the bobbin disc, and bobbin disc shaft, and this can be avoided by drilling a $\frac{3}{8}$ inch hole in the battery stand near the bottom, inserting a round pointed set screw with check or jam nut, and running the screw in until it contacts the bottom part of the bobbin disc. This will support the bobbin disc and hold the rings in the bobbin in battery in line with the bobbin guide. This should entirely stop the bobbin turning.

Very often the fixer becomes confused and works on the battery for filling breakage on the transfer, when in reality the filling is being broken on the second pick after the transfer is made. This occurs whenever the shuttle eye fails to become threaded after the transfer. This confusion can easily be avoided by first determining on, or near,

which selvage of the cloth the broken strand of filling is deposited. If broken on the transfer the broken end will be on the battery end selvage. If broken after the transfer has been made the broken end will be deposited near the selvage on the shipper handle end.

The loom picking later than top center position of the crank arm, on battery end, will break the filling on the first outgoing pick after the transfer is made. Should the loom pick later than top center the strand of filling extending from the shuttle to the thread guide is subjected to excessive strain by being drawn over the front wall of the shuttle near the shuttle eye, when the shuttle is about halfway out of the box on the pick.

All experienced weave room men will wonder why I have not had more to say about the shuttle going too deep into the shuttle box, as we all know, that under ordinary or universally existing conditions, this will cause filling breakage on the transfer. The reason is simply because we cannot prevent the shuttle from going deep enough into the shuttle box to allow the ingoing bobbin, on transfer, to sometimes contact the shuttle spring cover, or strap, in the shuttle. That is why I have suggested building up on and fixing the transfer hammer as I have. It will make this part of the procedure foolproof and will permit the complete wearing out of the picker before trouble is encountered. Fixing the transfer hammer as suggested will also stop the dubbing or splintering off of the bobbin on the butt end. Removing the top holder will also reduce the splintering off and wearing away of the bobbin on the small end.

CHATTANOOGA, TENN.—According to information released in hosiery circles here by E. McGill, treasurer and general manager, the directors of the Mountain City Knitting Mills here, which are engaged in the manufacture of half hose for men, have decided to liquidate the organization and retire from the hosiery manufacturing business.

The company is located at 1101-1109 Main street and was established here 23 years ago, and at one time had an operating personnel of 300 operatives. At present there are only a few operators since the organization has been tapering off for some time.

Mr. McGill did not announce his future plans or those of W. W. McGill, secretary, however, stated that these would probably be announced later.

McCOMB, MISS.—The machinery of the Van Dyke Knitting Mills here has been purchased by J. Itzkowitz, 133 West 25th street, New York, who is said to be a dealer in used machinery.

The machinery, housed in a building owned by the city of McComb and constructed in 1935 through public subscription, may be sold to someone who will continue production here, Mayor A. Cramer declared. He and several financiers of this district are working to get this result.

Under normal conditions, the Van Dyke Knitting company here employed approximately 200 persons whose annual payroll amounted to at least \$100,000, while 500,000 pounds of yarn were used each year, in addition to silk and wool.

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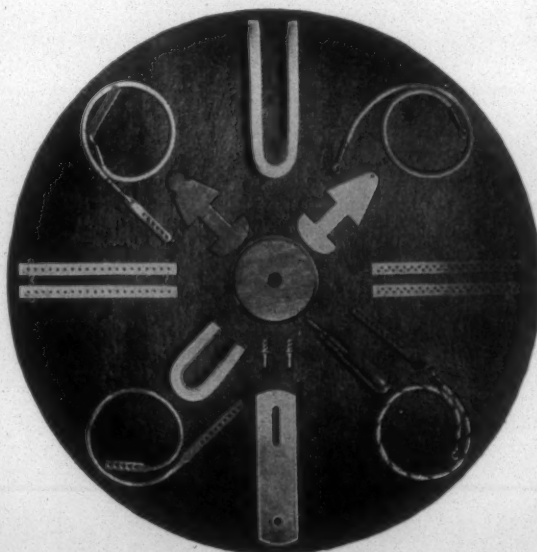
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IN THE CENTER OF MID-TOWN NEW YORK

Glancing Back at the Textile Industry in the First World War

(Continued from Page 49)

forced to absorb:

His greatest joy was in getting his first government contract.

The technical expert, of indispensable value, to fulfill the contract after he had gotten it, was not there to help him. The difficulties of obtaining fast dyes, blending for color, and the lack of finishing equipment caused delays, losses and reduced profits. The serious mistake of not passing, even when known, specifications requirements on down to the overseers of carding and weaving sections, often produced low quality fabric—particularly when the carding room overseer used the tricks of the trade to make a good showing in his department. Dates of delivery were fixed when the contract was made, but the dates were not taken very seriously by the manufacturers. Unfilled promises wrought havoc, slowed and bogged down the entire supply program. The mill owner slowly realized that an agreement to deliver on a certain date was as binding as an agreement to pay a note on a certain date.

Scientific management would make punctual delivery possible, through careful study and changes in method of manufacture. Learning this proved costly to many.

Lessons of the First World War—Plans Today

The Assistant Secretary of War and Director of Munitions, the Honorable Benedict Crowell, in his report, "America's Munitions," stressed that the outstanding lesson of the First World War was not that the United States could not produce munitions, but that *we could not produce them in time*.

Today, conditions are different.

The National Defense Act as amended June 4, 1920, specifically charged the Assistant Secretary of War "with supervision of the procurement of all military supplies and other business of the War Department pertaining thereto and the assurance of adequate provision for the mobilization of material and industrial organizations essential to war-time needs."

Under this directive, as you and I know, Procurement Planning Officers have visited with and surveyed the industrial facilities of the nation. In this way each facility has determined what item it is qualified to produce in a national emergency and signified its intention to do it, if and when in the opinion of the government, the emergency demands it.

There is a plan, the *Industrial Mobilization Plan*. Under this general plan, the industrial activities of the Army and Navy are co-ordinated, and the aggregate effort they require is adjusted to the commercial life of the nation.

While requirements, throughout the First World War, were computed on a hand-to-mouth basis, today's plans have determined *Estimates* and *Requirements* with great accuracy and completeness. Sound specifications and drawings covering the needed items and war-time contracts for the protection of government and industry alike are ready.

The Quartermaster Corps, as you and I know, is responsible for the development and improvement of items and for the procurement of all items of standard manufacture and supplies common to two or more branches,

special and technical equipment excepted. The largest of the *supply* branches, and the biggest buyer of textiles feels it has streamlined its needs to get mill and factory into production in a major emergency without chaos and confusion.

Nineteen hundred and forty finds this country rapidly building up its defenses so that the mothers of this nation will not bow their heads in tragedy and terror, nor be forced to flee from altar and fireside. All are learning how best they can help and placing duty before privilege.

May I quote from an address of Herbert E. Peabody, president of the American Association of Woolen and Worsted Manufacturers: "The first meeting of the board was held in General Goethals' office on March 7, 1918. General Goethals opened the meeting with a statement that criticism of army cloths had developed and that in and out of Congress the subject continued to be agitated. The board was created to go thoroughly into the subject of weight, textures, qualities and weave of army fabrics. He further stated that because of the agitation and reports from officers in the field, and because of a cable which he had received from General Pershing, he had decided that the troops going overseas shall be equipped with:

1. 20 oz. suiting
2. 32 oz. overcoating
3. 4-lb. blankets

He therefore instructed the board to proceed as rapidly as possible to establish the layout of their fabrics and it immediately commenced its work.

Telegrams were at once sent to the leading manufacturers instructing them to prepare samples of such weights, texture and quality as the board felt would comply with their instructions.

On Monday, March 18th, the Fabrics Committee, in consultation with the board commended its work of examining and passing upon the samples made in response to the telegraphic requests. On Thursday, March 21st, exactly two weeks from the board's appointment, it presented to General Goethals the completed specifications of the following fabrics:

1. 9½ oz. shirting
2. 20 oz. suiting (3 types)
3. 32 oz. overcoatings
4. 4 lb. blanket

with types representing same.

It is unnecessary to point out to a meeting of technical experts, the work that had to be done in that space of time, when it is borne in mind that the specifications had to be based upon all possible information as to available wool stocks, foreign and domestic, machinery and production."

Today, *Time* is more than ever the determining factor in war. The gasoline engine on land and in the air has revolutionized logistics, probably far beyond our ability to comprehend, unless we constantly take positive steps to estimate its implications. In planning industrial mobilization we must constantly remind ourselves not to prepare for the next war in terms of the last one, for future wars will move with far greater rapidity and require all our ingenuity to keep pace. The textile industry has an advantage because its problems remain basically the same.

In closing, I wish to give you a bird's eye view of the Textile Procurement program authorizations.

Fabric Items

From June 1, 1940

Duck	23,500,000 yds.
Webbing	1,977,000 "
Serge	9,306,000 "
Shirting	3,275,000 "
Melton	5,500,000 "
Blankets	2,343,000 each
Socks	9,542,000 pair
Woolen drawers	936,000 "
Woolen undershirts	956,000 each
Cotton herringbone twill	2,000,000 yds.
Cloth, cotton, uniform 8.2 oz.	6,930,000 "
Mosquito netting	7,100,000 sq. yds.

Sewed Items

From June 1, 1940

Raincoats—Oil treated and rubberized	590,000 each
Overcoats—Melton	74,000 "
Coats—Denim	1,035,000 "
Trousers—Denim	1,018,000 pair
Coats—Serge	294,500 each
Trousers—Serge	351,000 "
Trousers—Cotton, 8.2 oz.	258,000 pair
Shirts—Worsted	214,000 each
Shirts—Cotton, 8.2 oz.	183,000 "
Cotton shirts	5,791,000 "
Sleeveless undershirts	4,583,000 "

Editor's Note—These figures were released October 1st, and do not include the Government's purchases since that time.

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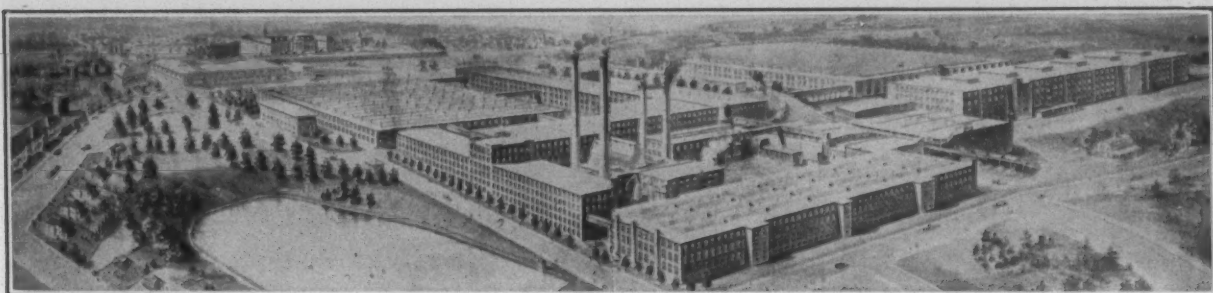
To be sold 2 P. M., December 20, 1940, at office of R. Marion Ross, 200 Law Bldg., Charlotte, N. C.

DAVID J. CRAIG, JR., Trustee of

H. S. McIntyre, Bankrupt,

819 Law Building,

Charlotte, N. C.



Visiting the Mills

Intimate Glimpses of Activities in Southern Textile Plants and the Men Who Own and Operate Them.

By Mrs. Ethel Thomas Dabbs (Aunt Becky)

KINGSPORT, TENN.

Borden Mills, Inc.

I always look forward to my trip to this delightful place, and more especially since Carolina's own W. J. Still became general manager. We would like to call him "a son of North Carolina" but must admit that he belongs to South Carolina. But his charming wife is a North Carolina girl, so we will call it even.

My daughter, Mrs. Carey Todd, of Clinton, N. C., accompanied me to Tennessee. It was her first trip to that State and she truly enjoyed everything, especially the hospitality extended us by Mr. and Mrs. Still.

Kingsport is one of the best business towns in the State, having a payroll of around \$1,000,000 per month. There are several different industries and the tonnage shipped out is said to equal that of Knoxville.

Borden Mills have modern equipment, runs regularly and employs a large number of people.

Tennessee Eastman Corp. is one of the largest industries in the South and makes about everything. In the textile line, the output is acetate rayon, staple fibre and cellulose products.

This company has one of the largest and nicest of cafeterias for the convenience of employees, but outsiders are welcome. My daughter and I were guests of Mrs. Still here one day for lunch where we found excellent service and prices amazingly reasonable compared to other places.

Superintendent John Cumnock, formerly of Warrenville, S. C., is filling his position here with credit and making many friends.

Ernest Cross, the genial buyer, W. L. Holyoke, plant engineer, H. C. Swann, overseer roll covering, W. V. Pierce, overseer cloth room, C. P. Powell, overseer weaving, J. C. Daniel, overseer carding, U. F. Cloninger and J. E. Peppers, overseers carding, and J. J. Jordan, overseer spinning, have been here a long time.

Among the new overseers are H. E. Sullivan in weaving and James W. Dickert in spinning.

W. D. Metts, and pretty wife, formerly of American Spinning Co., Greenville, S. C., are among the live wires here. He was my escort over this big plant and I could not have had a better one. Among our many friends are:

Berry Thomas, Hiram Godfrey, Martin G. Caldwell, S. G. Grogg, loom fixers; M. A. Powell, Hiram Maness, Clayton W. Kilgore and Ben Price, second hands in weaving; George Frost, head card grinder; Robert L. Hopper, section in carding; Lee Hovis, Niles Dickison, Joe Dendy and Cecil Ward are section men in spinning.

We have a fine list of Bulletin readers here and we are proud of them. Supt. John Cumnock was my first subscriber this time and the purchasing agent, J. H. Sloan, was my last.

Beautiful homes and churches, the best of grammar and high schools, live football teams, a fine band, and excellent community activities make this an ideal mill town.

KNOXVILLE, TENN.

Brookside Mills

Supt. B. W. Bingham is getting along nicely here. He has bought a nice home with all conveniences and several acres, all fenced in, a few miles out in the country. He teases his charming wife by telling her she must run the farm and raise their hog and hominy. She is certainly capable of superintending the farm.

Lefton K. Stewart is assistant to Superintendent Bingham and he has our sincere thanks for extended courtesies.

J. L. Thompson, overseer carding, and W. H. Connor, overseer spinning, are from North Carolina, and were once with Chadwick-Hoskins Co., of Charlotte.

J. B. Shelton is superintendent of weaving; John Thorpe, in No. 1, and Sam Fortner, in No. 2, are overseers of weaving; C. R. Boling is overseer slashing and drawing-in.

On second shift, Sam Rutherford is overseer carding; M. B. Baldwin is spinner, and Clarence Ward is weaver.

Boyd Smith, Herman Britt, Frank E. Smith and James Vann are among the progressive loom fixers.

H. F. Ledford, second hand in weaving; Ira L. Ashe, second hand in carding; Robt. B. Gresham, section man in carding; Fred C. Brewer, card grinder; Wm. L. Tal-lent, section man; Harrison Capps, card grinder; John Hurst, picker fixed; L. E. Wilkerson, second hand in spinning, and W. T. Hutchins, production man, are among the progressives.

John W. Card is assistant to General Manager A. L. Emory—both genial and friendly gentlemen.

Beautiful dress goods of various kinds are made here and can be bought at the sales room just inside the mill yard. Some mills won't give their employees a chance to buy the product they make.

Three cheers for Brookside Mills!

Cherokee Spinning Co.

This is one of the nicest mills in Knoxville and the product is fine combed yarns, fancy shirtings and lovely handkerchiefs. There is a sales room where products can be bought.

Some of the best people in the city are employed here and very frankly say that their mill officials are all that can be desired.

Certainly those we have had the pleasure of meeting are decidedly friendly and courteous. Buyer A. A. Wade, Gen. Supt. L. W. Deaver, Superintendent of Spinning M. J. Henegar and Superintendent of Weaving V. Veynar are hard to beat.

Wm. Burgury is designer; A. H. Holt, overseer slashing, warping and drawing-in; Sanford Babb, supply clerk; A. E. Whaley, overseer spinning; Frank Keough, overseer weaving; Geo. Williams, overseer carding; Mr. Money, overseer finishing; Sam H. Steele and Robert Drennan, slashers; J. C. Henson, E. D. Higgins, J. B. Coykendall, Jr., Frank Mantooth, J. E. Holland and others are among the key men.

P. S. The write-up for Carter Mills, Lincolnton, N. C., will be in the January 1st issue.

American Viscose To Pay Draftees for Three Months

All permanent employees of American Viscose Corp. of more than six months' standing, who enlist or are drafted for military training service, will be granted a special "Military Training Leave," according to an announcement made by William C. Appleton, president.

"Under the terms of this 'Military Training Leave,'" stated Mr. Appleton, "the employee affected is not only assured reinstatement at the termination of his period of service, but also receives differential pay for three months. This means that the company will pay him, for three months, the difference between what he would have earned from American Viscose and the amount he is paid by the government. In addition, if he holds a group insurance policy, this will be kept in force by the company. By these means, we hope to provide reasonable security to all employees entering service under the Selective Service Act."

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AMERICAN CYANAMID & CHEMICAL CORP., 30 Rockefeller Plaza, New York City. Sou. Office and Warehouse, 222 W. Morehead St., Charlotte, N. C.; Hugh Puckett, Sou. Sales Mgr. Reps., John D. Hunter, C. B. Suttle, Jr., A. W. Foley, Charlotte Office; E. J. Adams, 1404 S. 22nd St., Birmingham, Ala.; Jack B. Button, 1202 W. Market St., Greensboro, N. C.; Eugene H. Driver, 272 14th St., N.E., Atlanta, Ga.; Wilton H. Earle, Jr., 409 Westfield Ave., Greenville, S. C.

AMERICAN MOISTENING CO., Providence, R. I. Sou. Plants, Charlotte, N. C., and Atlanta, Ga.

ARMSTRONG CORK CO., Industrial Div., Textile Products Section, Lancaster, Pa. Sou. Office, 33 Norwood Place, Greenville, S. C. J. V. Ashley, Sou. Dist. Mgr.

ARNOLD, HOFFMAN & CO., Inc., Providence, R. I. Chester L. Eddy, Asst. Sales Mgr., 903-904 Woodside Bldg., Greenville, S. C. Sou. Reps., W. Chester Cobb, and Erwin Laxton, Charlotte, N. C. Office: John H. Graham, Box 904, Greenville, S. C.; Harold T. Buck, 1615 12th St., Columbus, Ga.; John R. Brown, P. O. Box 331, Meridian, Miss.

ASHWORTH BROS., Inc., Charlotte, N. C. Sou. Offices, 44-A Norwood Place, Greenville, S. C.; 215 Central Ave., S.W., Atlanta, Ga.; Texas Rep., Textile Supply Co., Dallas, Tex.

ATLANTA HARNESS & REED MFG. CO., Atlanta, Ga. Succeeded by Steel Heddle Mfg. Co., Atlanta Div. (See this company's listing.)

AUFFMORDT & CO., C. A., 2 Park Ave., New York City.

BANCROFT BELTING CO., Boston, Mass. Warehouse and Sou. Distributor, Carolina Supply Co., Greenville, S. C.

BARBER-COLMAN CO., Rockford, Ill. Sou. Office, 31 W. McBee Ave., Greenville, S. C. J. H. Spencer, Mgr.

BARKLEY MACHINE WORKS, Gastonia, N. C.

BECCO SALES CORP., Buffalo, N. Y. Sou. Reps., J. D. Quern and D. S. Quern, 1930 Harris Road, Charlotte, N. C.

BORNE, SCRYMSEY CO., 17 Battery Place, New York City, and 815 W. Morehead St., Charlotte, N. C. Sou. Mgr., H. L. Siever, P. O. Box 1169, Charlotte, N. C. Sales Reps., W. B. Uhler, 608 Palmetto St., Spartanburg, S. C.; R. C. Young, 1546 Stanford Place, Charlotte, N. C.; John Ferguson, P. O. Box 592, LaGrange, Ga.

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CHARLOTTE LEATHER BELTING CO., Charlotte, N. C.

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WHITIN MACHINE WORKS, Whitinsville, Mass. Sou. Office, Whitin Bldg., Charlotte, N. C., W. H. Porcher and R. I. Dalton, Mgrs.; 1317 Healey Bldg., Atlanta, Ga. Sou. Reps., M. P. Thomas, Charlotte Office; I. D. Wingo and M. J. Bentley, Atlanta Office.

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WOLF, JACQUES & CO., Passaic, N. J. Sou. Reps., C. R. Bruning, 306 S. Chapman St., Greensboro, N. C.; G. W. Searell, Box 102, Lenoir City, Tenn.

Pacific Mills Discontinues Rayon Weaving Divisions

Pacific Mills has made known to the trade that the company was discontinuing its rayon weaving divisions at Lawrence, Mass., and Dover, N. H. Workers at these plants have already been notified.

The company further advises that this action does not in any way affect its rayon finishing and merchandising activities at the Lawrence Print Works and New York, as a larger proportion of the company's gray fabric requirements has always been purchased from outside weaving plants.

The company's statement follows:

"The management for some time has carefully studied the company's rayon weaving divisions at Dover and Lawrence. When the company discontinued its cotton manufacturing at Lawrence and Dover, respectively, these rayon divisions were started with the hope that the company's plants, including machinery previously used for cotton manufacturing, might thus be utilized and a substantial number of employees given work in these communities.

"These divisions, unfortunately, have not proved successful. Our studies show that if they are to be continued large expenditures should be made for new, modern rayon machinery in place of certain of the cotton machinery of which the company has made use. The company does not feel that such expenditures are justified or offer prospect of sufficiently successful operations in the future.

"The company has, therefore, reluctantly decided that the weaving of gray rayon fabrics will be discontinued. The mills used for this purpose at Dover and Lawrence will be closed and the machinery, except such as may be useful in our present cotton and worsted mills, will be sold.

"Orders will be filled and the mills run out. It is anticipated that this will take several months, during which period employees will be gradually laid off.

"The company sincerely regrets the necessity of taking this action, and has done so only after the most careful consideration of all the factors involved."

J. P. Stevens & Co. To Sell for Exposition Mills, Atlanta Unit

Effective as of December 1st, the products of the Exposition Cotton Mills, Atlanta, Ga., unit, will be sold through J. P. Stevens & Co.

The Atlanta plant of Exposition is listed by Clark's Directory as having 1,544 looms and 69,064 spindles. It produces osnaburgs, sateens, twills, and drills as well as specialties and semi-specialties for the industrial and related trades.

9,000 Miles Serge, 10,000 Tons Wool in British Army Order

London.—The British Ministry of Supply announces that the largest contract yet placed for serge battle dress has been awarded.

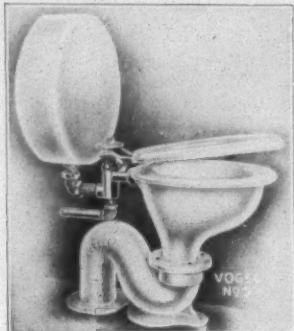
The contract comprises 5 million blouses and 6 million trousers. It will require 9,000 miles of serge, absorbing 10,000 tons of wool, and will draw on the manufacturing resources of 150 woolen firms and 250 clothing contractors. A total of 9,000 miles of lining material will also be needed.

It is understood that production for the fulfillment of this contract has already begun.

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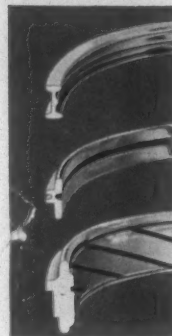
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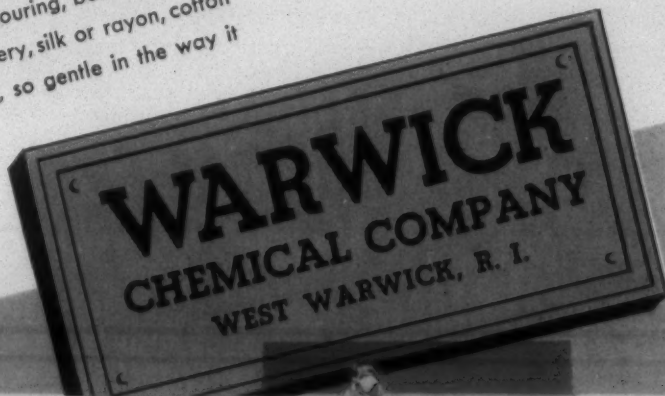
WARCO'S new soap substitute cuts down processing costs, too. It's more economical than soap because you use less than one half the amount required for soap solutions. And SULFANOLE K rinses at top speed . . . rinses thoroughly!

The problems usually encountered when soap is used just aren't there when SULFANOLE K is used. It's immune to hard water, alkali or acids for that reason will not cause lime soap or similar complications.

If it's real results you're looking for . . . try this efficient, speedy Tough Guy. Ask for SULFANOLE K for scouring, boiling off, and dyeing of piece goods, raw stock, hosiery, silk or rayon, cotton or wool. It's tops in efficiency but oh, so gentle in the way it effects fabrics!

If you have a plant problem, ask a Warwick technical advisor to help you with it. There's a Warco Sulfanole Detergent for every plant problem, and he will advise you on a formula for your individual needs. Our "problem shooting" services are yours for the asking . . . without cost!

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